How EJ&E uses a three-in-one **radio** network to give service to its customers. . . . . p. 34

McCARTNEY LIBRARY
GENEVA COLLEGE

August 13, 1962

RAILWAY AGE WEEKLY

Are Canadian roads 'less safe'?

Is attrition the best answer?

How have other unions reacted?

Canada's Firemen . . . . p. 22

at lessons can the U. S. learn?

RD62 1116
McCARTNEY LIBRARY
GENEVA COLLEGE
BEAVER FALLS PA

cents: A Simmons-Boardman TIME-SAVER Publication
Second Class Postage Paid at Orange, Conn.

THE HOT BOX—HEADACHE OR ECONOMIC MIGRAINE?

Servo Corporation Offers an Answer

The ICC has just issued annual report No. 129 covering 1960 operations. As with every previous year since dieselization, cost of derailments is up—a whopping 14% this time—to $45½ millions in damage to railroad property alone. And still, as always, heading the list of causes is "overheated journals".

Is this just a recurrent cost headache, or has the familiar hot box finally become an excruciating and intolerable economic migraine? Before you decide, consider that along with that $45½ millions in derailment damage, plus all the attendant injury, property liability, and shippers' claims, was lost another staggering $¼ *billion*—the industry's annual bill for repairing and replacing journals and bearings—much of which could have been saved by early detection and preventive maintenance of incipient hot boxes.

Conversion to lubricators and special bearing designs is still aimed at reducing the *cause* of the malady. Meanwhile, the patient grows weaker from its *symptoms*.

Let's face facts. The biggest question today is "How do we live *with* the hot box problem?" More than 350 SERVOSAFE® Hot Box Detective* installations on 28 major Class I roads are providing the answer. Located outside yards, terminals and interim inspection points; on approaches to bridges and tunnels; and along the main line—they perform 100% infrared electronic inspection of *every* journal on *every* passing train. This data is automatically converted to a permanent record for the train crew or yard office... forewarns of overheating... concentrates maintenance on known trouble spots. Inspection time is speeded up, and chances of down-the-line burnoffs, axle damage, traffic delay, and derailments are greatly reduced.

A task force of SERVOSAFE® Hot Box specialists stands ready to analyze, lay out, and estimate the cost of your requirements. Their more than eight years' experience in the early infrared detection of hot boxes is without parallel in the industry. And when your SERVOSAFE® System is in, a Servo representative will train your personnel in its most effective use and maintenance. This year—regardless of financial condition—you can't afford *not* to be SERVOSAFE.

Selective maintenance at New York Central Railroad's service yards concentrates on trouble spots indicated by approach-to-yard SERVOSAFE® *Hot Box Detective* Systems. Among the first to use these detectors, the Central now has 58 installations distributed on a system-wide basis.*

Railroad Products Division

SERVO CORPORATION OF AMERICA

111 New South Road • Hicksville, L. I., N. Y. • WEls 8-9700

*Protected under one or more of the following U.S. Patent Nos.: 2,880,309, 2,947,857 and 2,963,575. Other U.S. and foreign patents pending.

Dick Harwick, SKF Railway Sales Engineer, explains:

Why cylindrical rollers make the SKF "EXPEDITER" outperform any other bearing

"The cylindrical roller design of SKF 'EXPEDITER' bearings provides operating advantages you just don't get in any other bearing design. For instance:

"You get greater high-speed capability in cylindrical roller bearings than with other types, under radial, thrust, or combined radial-thrust loads.

"Operating temperatures are lower in cylindrical roller bearings. Wedging action is completely eliminated because the cylinder is a true rolling element.

"Longer lubrication intervals, too—as a result of high-speed capability and lower operating temperature. Recommended cycle is now up to 48 months!"

For more details on the "EXPEDITER", and why it's the best choice for freight cars, call Dick Harwick, or the SKF Railway Sales Engineer nearest you. If you'd rather see some literature on the "EXPEDITER" first, write to SKF Industries, Inc., Front Street and Erie Avenue, P.O. Box 6731, Philadelphia 32, Pa.

6226

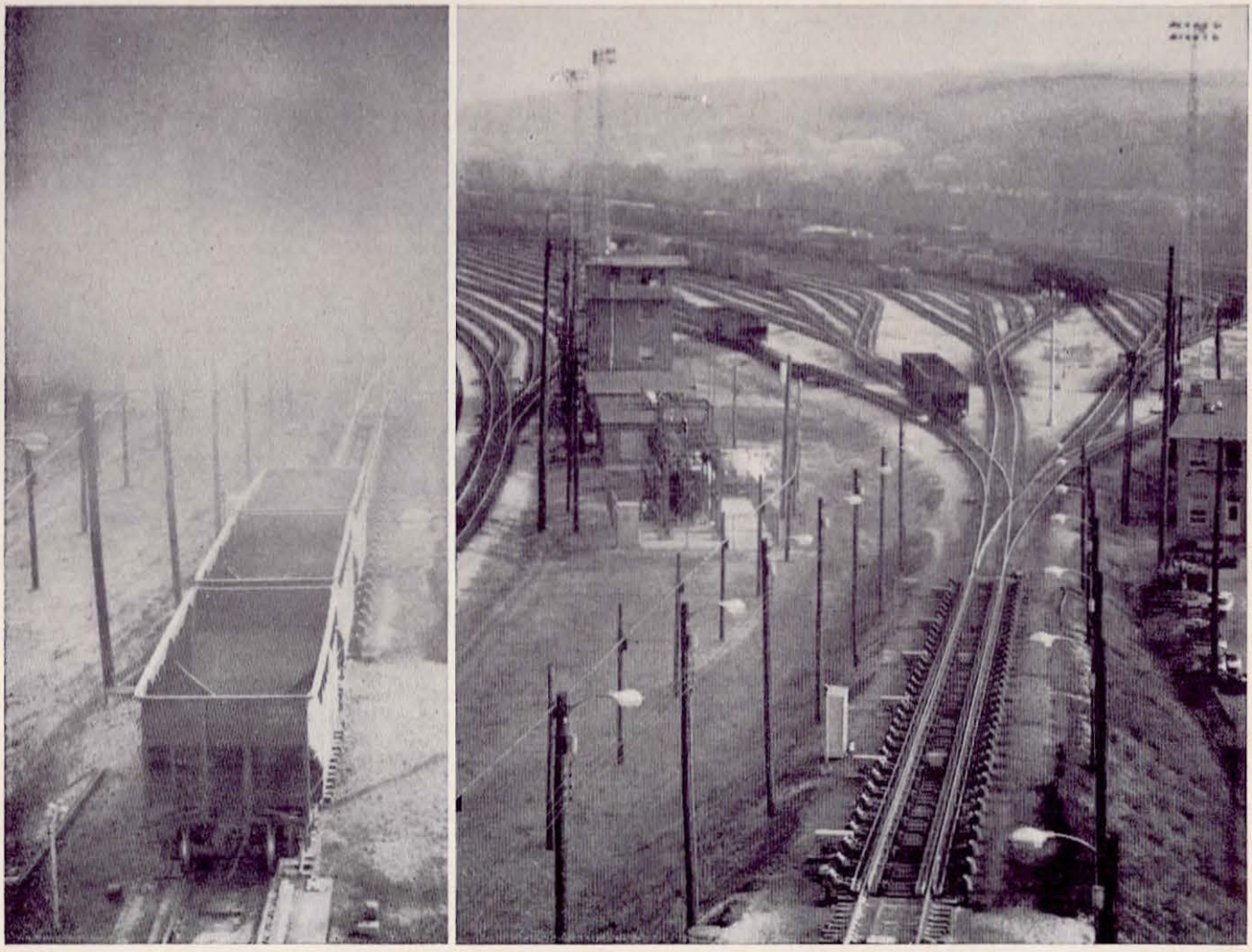
SKF® MOTION ENGINEERING

Advanced ball and roller bearing technology

GEARED TO PROGRESS

RPI MEMBER

P&LE's Gateway Yard classifies 4 cars a minute —even with zero visibility



The thickest Mahoning River fog doesn't slow up classification at Gateway Yard. Over 40,000 cars a month roll down the hump onto 35 classification tracks that handle 2200 cars per day. The cars couple so gently that lading damage has been reduced to less than a tenth of one percent, most of this being merely shifted pipe. The entire yard—that can hold 6500 cars—replaced four other yards and has cut handling time in half. By reducing per diem and other expenses, this 9-million-dollar facility will pay for itself in only 8½ years.

It's all done with a Union Switch & Signal VELAC® Automatic Classification Yard System. Every operation is automatic, from the hump crest to the gentle coupling of each car. Radar units check each car's rolling characteristics and speed, and feed the data to an electronic computer. The computer figures the correct speed for each car leaving the retarders after adding such factors as car weight, weather conditions, track conditions, wind strength and direction. Cars leave the group retarders at the proper speed to insure gentle coupling. The VELAC system increases car utilization and increases over-all efficiency by eliminating costly and inefficient manual switching operations.

If you would like to have more complete information about VELAC Automatic Classification Yard Systems, contact Union Switch & Signal.

WABCO

UNION SWITCH & SIGNAL DIVISION

PITTSBURGH 18, PENNSYLVANIA/Westinghouse Air Brake Company

RAILWAY AGE

August 13, 1962 • Vol. 153, No. 7

WEEK AT A GLANCE

Embattled 'ops' wage last-ditch fight

The brotherhoods' efforts to forestall drastic work-rule changes, due Aug. 16, took the form last week of a courtroom battle in Chicago .....p. 9

E-L Travelift speeds new yard track job

The machine is being used, in conjunction with a conventional locomotive crane, to expedite track construction in the new Buffalo, N. Y., classification yard p.15

Canada's firemen-off story

Railroad experience north of the border since 1958 lends weight to U. S. railroads' determined attempt to remove firemen from diesels in yard and freight service p.22

L&N automates Nashville mail

An automated GE mail-handling system, with a normal hourly capacity of 2,400 mailbags, has been installed in Nashville Union Station at a cost exceeding $500,000 .....p.28

How EJ&E uses its 3-in-1 radio system

Improved service to customers has resulted from a special tone coding arrangement that permits operation of private radio systems in three yards on a single frequency p.34

GN builds cabooses on production line

The road used mass production techniques to build 15 30-ft steel cabooses in its St. Cloud shops. All components except roofs and running boards were shop fabricated p.35

Water carriers blast Kennedy bills

The Administration's rate proposals would amount to a "death warrant" for inland-waterway carriers, the House Interstate Commerce Committee was told last week p.43

Departments

Editors Afield	36
Freight Carloadings	39
Letters from Readers	41
New Equipment	39
New Products Report	37
Railroading After Hours	17
People in the News	42
Supply Trade	42
Railway Market	39
Watching Washington	10
The Action Page	46
You Ought to Know	44

Editorial Staff

• **Editorial and Executive Offices**
New York 7, 30 Church St.

JAMES G. LYNE, Editor
ROBERT G. LEWIS, Publisher
JOE W. KIZZIA, Executive Editor

Managing Editor.....Fred C. Miles
News Editor.....Luther S. Miller
Traffic-Transportation .....G. C. Hudson
Associate Editors
Gus Welty — Rod Craib
Mechanical
C. L. Combes — F. N. Houser, Jr.
Signaling & Communications
Robert W. McKnight
Librarian .....Edith C. Stone
Editorial Assistant .....June Meyer
Art Director .....Russell F. Rypsam

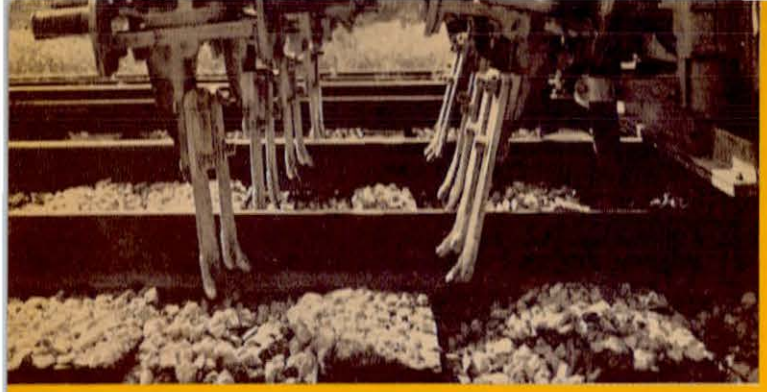
Design and Layout.....Joel Petrower
Director of Research .....J. W. Milliken
Production Manager .....Joseph J. Menkes
Manager Contract Dept.....Elsie M. Pritchett

• **Chicago 2, 22 W. Madison St.**
Western Editor .....John D. Mitros
Transportation Editor .....William V. Tuite
Mechanical .....Norman E. Gillespie
Engineering .....M. H. Dick
R. E. Dove — E. W. Hodgkins, Jr.
Purchasing & Stores .....Richard Stahl
Editorial Assistant .....Wanda Brown

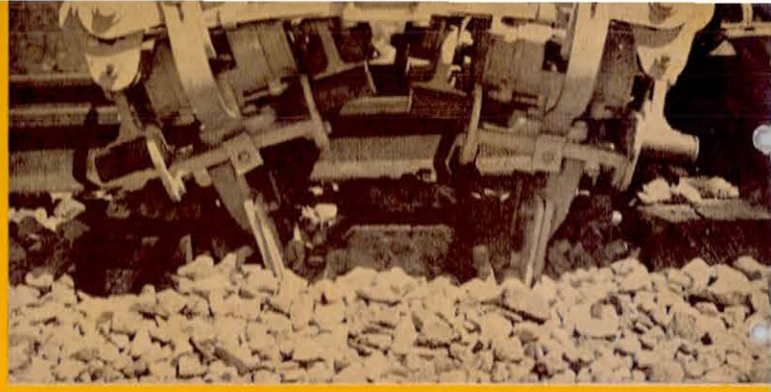
• **Washington 4, National Press Bldg.**
Washington Editor.....Walter J. Taft

• **The Hague, Netherlands, Lange Poten 29**
International Editor .....Gordon Huffines

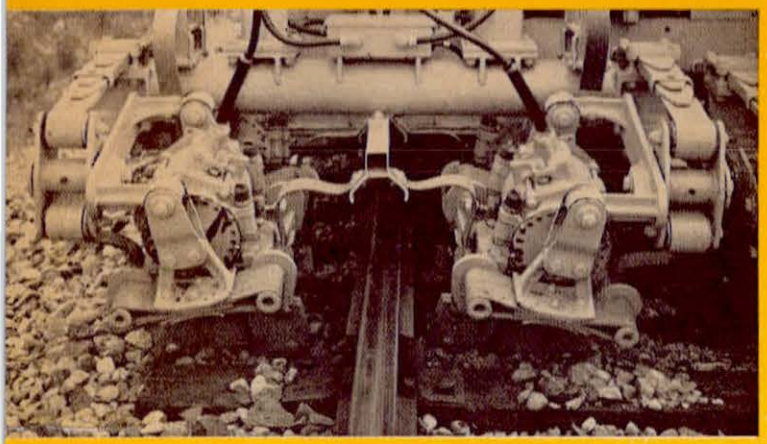
Railway Age, established in 1956, is indexed by the Business Periodicals Index, the Engineering Index Service and the Public Affairs Information Service. Name registered in U.S. Patent Office and Trade Mark Office in Canada.
Published weekly by the Simmons-Boardman Publishing Corporation at 440 Boston Post Road, Orange, Conn. Second-class postage paid at the Post Office at Orange, Conn. James G. Lyne, chairman of the board; Arthur J. McGinnis, president and treasurer; Duane C. Salisbury, executive vice president; George Dusenbury, vice president and editorial and promotion director; Robert G. Lewis, vice president and secretary; J. R. Thompson, J. S. Vreeland, H. H. Melville, Joe W. Kizzia, M. H. Dick, W. J. Figa, C. J. Fisher, K. F. Sheeran, F. T. Baker, vice presidents; Robert H. Lash, vice president and director of circulation.



Tamping bars begin penetration of ballast in approximately a vertical position



As penetration continues they are directed at an angle right under the tie



And sidewise under the rail, thereby achieving maximum consolidation in the vital load-bearing zone

The result is a smoother, more densely consolidated tie-bed than can be accomplished with any other equipment

For Track that "stays put" longer use **JACKSON TRACK MAINTAINERS**

Remove a tie that has been tamped with a JACKSON Track Maintainer and you will find the ballast so uniformly and thoroughly keyed together as to resemble a mosaic floor . . . perfect consolidation from the end of the tie, right under the rail and to the desired distance between the rails. This is the result of Jackson's exclusive, powerful vibratory action producing, in the case of the 1962 Track Maintainer, more than 6700 lbs. of downward force and over 2100 lbs. of horizontal force 4200 times per minute *in the ballast* for each of the eight tamping units. Track of this character is bound to "stay put" longer and be more economical to maintain.

8 highly important improvements in the '62 model

Faster penetration, faster workhead action, faster indexing, full electric push-button operation, greatly increased vertical and horizontal vibratory forces, motor and generator protection against short circuits, single phasing and low voltage, faster, more positive braking . . . all are incorporated in the '62 Track Maintainer. And with these improvements it continues to be way out ahead of the parade. Be safe, be SURE. Buy JACKSON'S . . . backed by the greatest service organization in the railroad field.

Write, wire or phone for further information

As always, direct sales, leases and service to all U.S. railroads

JACKSON VIBRATORS, INC.
LUDINGTON, MICH., U.S.A.

IR2-2

WEEK AT A GLANCE

The Action Page: Furloughs—whose fault?

The catastrophic decline in railroad employment can be attributed directly to restrictive legislation and regulation fostered by government p.46

Short and Significant

An electronic wrist watch . . .

has been approved for use by train crews on the Southern Pacific. Made by Bulova, the Accutron watch uses a tuning fork and a small power cell in place of conventional movements.

Research in improved means of collecting fares . . .

will be carried out by the Institute for Rapid Transit. The goal is twofold: to move passengers through stations faster, and to cut the high cost of conventional fare collection.

Coordinated meetings . . .

of Air Brake, Car Department, Locomotive Maintenance, and Fuel and Operating men will be held Sept. 16-19, 1962, in the Sherman House at Chicago.

Tentative program . . .

has been arranged for a big railroad show Oct. 9-16, 1963, at McCormick Place, Chicago. Exhibits will be sponsored by four supply associations during meetings of nine railroad groups.

Record loads . . .

were carried in freight cars last year, the average having been 44.9 tons. The AAR says this increase over 1960's 44.4 tons saved 433,000 carloads.

Current Statistics

Operating revenues	
3 mos., 1962	$2,295,749,272
3 mos., 1961	2,128,376,735
Operating expenses	
3 mos., 1962	1,830,377,994
3 mos., 1961	1,780,358,037
Taxes	
3 mos., 1962	257,685,487
3 mos., 1961	228,925,289
Net railway operating income	
3 mos., 1962	112,621,164
3 mos., 1961	23,354,922
Net income estimated	
3 mos., 1962	66,000,000
3 mos., 1961	D. 12,000,000
Carloadings revenue freight	
31 wks., 1962	16,984,092
31 wks., 1961	16,354,877
Freight cars on order	
July 1, 1962	13,274
July 1, 1961	11,821
Freight cars delivered	
6 mos., 1962	19,984
6 mos., 1961	18,782
Serviceable cars	
July 1, 1962	1,452,888
July 1, 1961	1,485,802
Cars awaiting repairs	
July 1, 1962	129,215
July 1, 1961	151,901

Advertising Sales Department

Duane C. Salisbury—director of sales

New York 7, N. Y., 30 Church St.,
WOrth 4-3060
J. S. Vreeland—vice president;
F. T. Baker—regional vice president;
W. A. Cubbage

Chicago 2, Ill., 22 W. Madison St.
RAndolph 6-0794
J. R. Thompson—vice president;
K. F. Sheeran—regional vice president;
D. A. Denno

Cleveland 15, Ohio, 1501 Euclid Ave.,
MAin 1-4455
H. H. Melville—vice president;
C. J. Fisher—district manager

Pittsburgh 19, Pa., Suite 203, Carlton House
GRant 1-8186
C. J. Fisher—regional vice president

Atlanta 9, Ga., 22 Eighth St., N. E.,
TRinity 2-6720—J. S. Crane

Dallas 19, Tex., 3915 Lemmon Ave.,
LAkeside 1-2322—Joseph Sanders

Los Angeles 17, Cal., 1336 Wilshire Blvd.
HUbbard 3-8414—Fred Klaner, Jr.

San Francisco 11, Cal., 916 Kearney St.
GArfield 1-7004—Lewis A. Vogler

Portland 5, Ore., Terminal Sales Bldg.,
CApitol 7-4993—Peter W. Klaner

London S. W. 1, England
TRAfalgar 6318
67/68 Jermyn St., St. James's
Max F. Holsinger; R. N. Lees;
A. T. Chapman-Purchas

Harrogate, Yorkshire, England
11 Tewit Well Road
Harrogate 69212—P.W.B. King

Dusseldorf, Germany
Huttenstrasse 17
Max F. Holsinger; G. W. Rohde;
E. Hillerbrand

Railroad employees' subscription rate: U. S. possessions, Canada and Mexico, $6 one year, $8 two years, payable in advance and postage paid. To railroad employees elsewhere in the western hemisphere, $10 a year. In other countries, $15 a year. Single copies 60¢ except special issues. Address all subscriptions, changes of address and correspondence concerning them to: Subscription Dept., Railway Age, Emmett St., Bristol, Conn.
Change of address should reach us three weeks in advance of next issue date. Send old address with new, enclosing, if possible, your address label. Post Office will not forward copies unless you provide extra postage.
Circulation Dept.: John E. Rogers, Circulation Manager, 30 Church St., New York 7, N. Y.
POSTMASTER—SEND FORM 3579 to EMMETT ST., BRISTOL, CONN.
Printed at the Wilson H. Lee Co., Orange, Conn.

"EVEREADY" Your "green light" to safety... *with savings*

Save $40 yearly per oil switch lamp by electrifying with "EVEREADY" batteries!

COUNT *your* oil switch lamps! • The more you convert— the greater your savings • With electrified lamps you get brighter, more uniform light • You eliminate the danger and expensive "baby-sitting maintenance" that go with oil.

With "EVEREADY" "Air Cell" batteries you get virtually 100% unattended operation— through dependable, low-cost, all-weather packaged power • Just add water— use them up and throw them away • Get the full story on the savings you will realize by electrifying your switch lamps with "EVEREADY" "Air Cell" batteries!

"Eveready," "Air Cell," and "Union Carbide" are registered trade-marks for products of

NATIONAL CARBON COMPANY

Division of Union Carbide Corporation • 270 Park Avenue, New York 17, N.Y.

IN CANADA: Union Carbide Canada Limited, Toronto

UNION CARBIDE

'Op' Unions Wage Last-Ditch Fight

► **The Story at a Glance: Late last week the five operating brotherhoods were still in U.S. district court, seeking injunctive relief from the work-rule changes scheduled to become effective Aug. 16. The plea for a restraining order followed dismissal of their suit alleging that the proposed changes are in violation of the Railway Labor Act.**

Union spokesmen indicated that failure to receive the temporary order pending an appeal of the district court's ruling will force a strike—the organizations' last resort to prevent the carriers' rule-change proposals from becoming effective.

Secretary of Labor Goldberg has reportedly said that a railroad strike of any consequence would not be tolerated. If a restraining order is not issued, it's believed likely an emergency board will be created.

U.S. District Court Judge Joseph Sam Perry last week ruled against the five operating brotherhoods' last-ditch effort to block the carriers' scheduled implementation of work-rule modernization proposals later this week.

A brotherhood suit alleging that the rules promulgation of July 17, seeking to implement the recommendations of the Presidential Railroad Commission, is in violation of the Railway Labor Act became pointless when the carriers withdrew the promulgation and substituted their original Section 6 notice of Nov. 2, 1959 *(see page 40)*.

Brotherhood lawyers immediately filed an amended complaint attacking the Section 6 notice on substantive rather than procedural grounds. But Julge Perry dismissed the amended complaint and at week's end was considering the bortherhoods' request for a preliminary injunction to delay the rules changes pending appeal of his decision to the U.S. Court of Appeals.

The carriers' decision to go for action on their original 1959 notice was viewed as a move to avoid further court delays—and most observers are interpreting the 1959 demands as far more severe than the July 17 notice which was based on the PRC report.

Union spokesmen agreed, up to a point. They also noted that a number of demands—including some which are most distasteful to the brotherhoods—don't figure at all in the 1959 notice.

In the meantime, courtroom speculation centered on the course the dispute might take in the short time left in the cooling off period since the National Mediation Board stepped out of the picture July 16. With machinery already in motion to bring off an immediate work stoppage if the carrier proposals are carried out Aug. 16, it seemed inevitable that President Kennedy would create an emergency board to investigate the dispute—delaying a strike and the proposed changes for at least 60, probably 90, days.

James E. Wolfe, chairman of the Western Carriers Conference Committee, said, "We feel an emergency board will immediately be appointed to investigate the dispute and all the recommendations of the Presidential Railroad Commission will be brought before it."

A brotherhood spokesman, however, differed with Mr. Wolfe and contended that "the PRC report is now out of it. An emergency board will only consider the original Section 6 notices."

There were moments of edginess as the dispute dragged through four days of complicated maneuvering in court. A press report at one time indicated a strike date had been set, but the unions quickly denied it. What actually happened, they said, was that strike instructions — from individual organizations and from the five jointly—had been sent out. No strike date would be set, they emphasized, so long as the dispute was still tied up in court.

Most of the activity last week was procedural—the tying up of loose ends and the tidying of affairs in anticipation of President Kennedy's creating an emergency board.

Setting of a strike date would be, probably, the final step in that procedure. Union spokesmen indicated the National Mediation Board would be notified first, if and when a date is set. Then it would be up to the board to judge the seriousness of the situation and notify the President that a transportation interruption threatened.

The carriers' sudden switch from promulgation of the PRC recommendations to implementation of their original 1959 notices seemed to have elements of gain for both sides.

In the major areas of the industry's anti-featherbedding drive—the firemen, the wage structure, manning requirements, road and yard assignments, inter-divisional runs—the 1959 demands are far tougher than the PRC recommendations. Under the PRC report, for example, 13,000 firemen would be dropped over a one-year period and the remaining 27,000 would go by attrition. Under the 1959 notice, all 40,000 firemen could be eliminated immediately.

Union sources, however, pointed to certain areas where the PRC report (and the carriers' July 17 promulga-

THE PRICE TAG

Railroad management last week pinned a new price tag to the "make-work" practices that harass the industry.

Testifying at the Chicago hearing on a brotherhood motion for a preliminary injunction pending an appeal to a higher court, J. E. Wolfe told a district court that featherbedding is costing the railroads $592,062,000 a year, on the basis of 1961 operations.

Mr. Wolfe, chairman of the Western Carriers Conference Committee and Chief negotiator for the railroads in the work-rules dispute, said compensation for unneeded firemen accounts for $270,153,000 of the featherbedding bill, and the obsolete dual basis of pay accounts for $127,970,000.

When they began their drive to eliminate featherbedding three years ago, the railroads estimated the annual drain at a round figure of $500 million.

WATCHING WASHINGTON WITH WALTER TAFT

● **NEW DEVELOPMENT** in investigations of railroad accidents is an ICC order directing its Bureau of Inquiry and Compliance to participate. The accident involved is the July 28 derailment of a Pennsylvania "baseball special" near Harrisburg, Pa., where 19 persons were killed and 100 injured.

THE COMMISSION, on June 30, instituted a formal investigation of the accident, docketing the probe as Ex Parte No. 231. It set hearings for August 20 at Harrisburg before Commissioner McPherson and Examiner Vinskey. And it followed through with an August 2 order directing the Bureau of Inquiry and Compliance to participate.

THAT ORDER marked the first departure from the Commission's former practice of leaving investigations of such accidents to the Safety Bureau. It was based on the Commission's determination that the Inquiry Bureau "would aid in more clearly and expeditiously developing all of the facts."

THE ACCIDENT has been used by railroad labor unions to raise questions as to whether inadequate maintenance was to blame. "Labor," the unions' publication, quoted unnamed union officials as having said "the tragedy might have been averted by legislation pending in Congress, backed by the rail unions but opposed by the railroads," which would give the ICC authority to prescribe rules for maintenance and repair of tracks, bridges and cars.

THE UNDERMAINTENANCE CHARGE has been refuted by the PRR. James P. Newell, vice-president of the road, concedes that a track out of alinement caused the wreck, but he insists that the improper alinement was due to a maintenance gang's failure to apply the required number of rail anchors.

● **GENERAL INCREASES** of the post-war period raised railroad freight rates an average of 115.2%. The ICC's Bureau of Transport Economics and Statistics has estimated that increases authorized in the latest general case, Ex Parte 223, built the general level to that point above the level of June 30, 1946. Although the main Commission decision in Ex Parte 223 was issued in October 1960, the Bureau's estimate was delayed because some phases of the case were not decided until this year.

BY COMMODITY GROUPS, the cumulative post-war increases ranged from 90.8% for Products of Mines to 133.4% for Less-Carload Traffic. Increases for the other groups are: Products of Agriculture, 97.7%; Animals and Products, 118.2%; Products of Forests, 119.9%; Manufactures and Miscellaneous and Forwarder Traffic, 129.7%.

THE ESTIMATES take into consideration the effect of exceptions whereby rates on some commodities got no increases, or were raised less than the amount of the general advance. They also assume that increases on intrastate traffic followed the pattern of the interstate increases.

● **ANOTHER STUDY** by the ICC Bureau shows that rail hauls of freight average about 442 miles while hauls by common-carrier truckers average 272 miles. For contract truckers, the average is 184 miles.

SINCE 1939, the rail haul has ranged from that year's 351.2 miles to 469 miles in 1943. The 442-miles average noted above was for 1960, the latest year for which figures are available. It was less than 1959's 447.7 miles and 1958's 444.6 miles.

THE RANGE of average hauls for common-carrier truckers since 1939 has been from 1943's 192 miles to 1959's 273 miles. The average haul of shipments handled by contract truckers has increased consistently to 1960's 184 miles.

tion) went beyond the 1959 notice. The original carrier demands, they noted, didn't cover any retire-at-65 plan. Nor did they require serving of notices by all organizations on all carriers. Finally, the 1959 notice mentioned nothing about arbitration of issues by "special tribunals"—a creation of the PRC which the railroads adapted in their July 17 promulgation and which the unions regard as nothing short of compulsory arbitration.

One union leader, comparing the PRC report with the original demands, said: "One's as bad as the other." The Nov. 2, 1959, notice, he said, shows the "harsh, immediate application . . . of what the PRC would do in time, with salve for the open wound. The PRC recommendations would be just as damaging in the long run."

Protective conditions, he conceded, are included in the PRC promulgation and not in the 1959 notice—but "protective conditions are the last thing we have to worry about right now."

The week in court was a cliffhanger for the unions. From the opening session, they scrambled to make a case and were blocked at almost every turn, either by carrier tactics or by the judge's rulings.

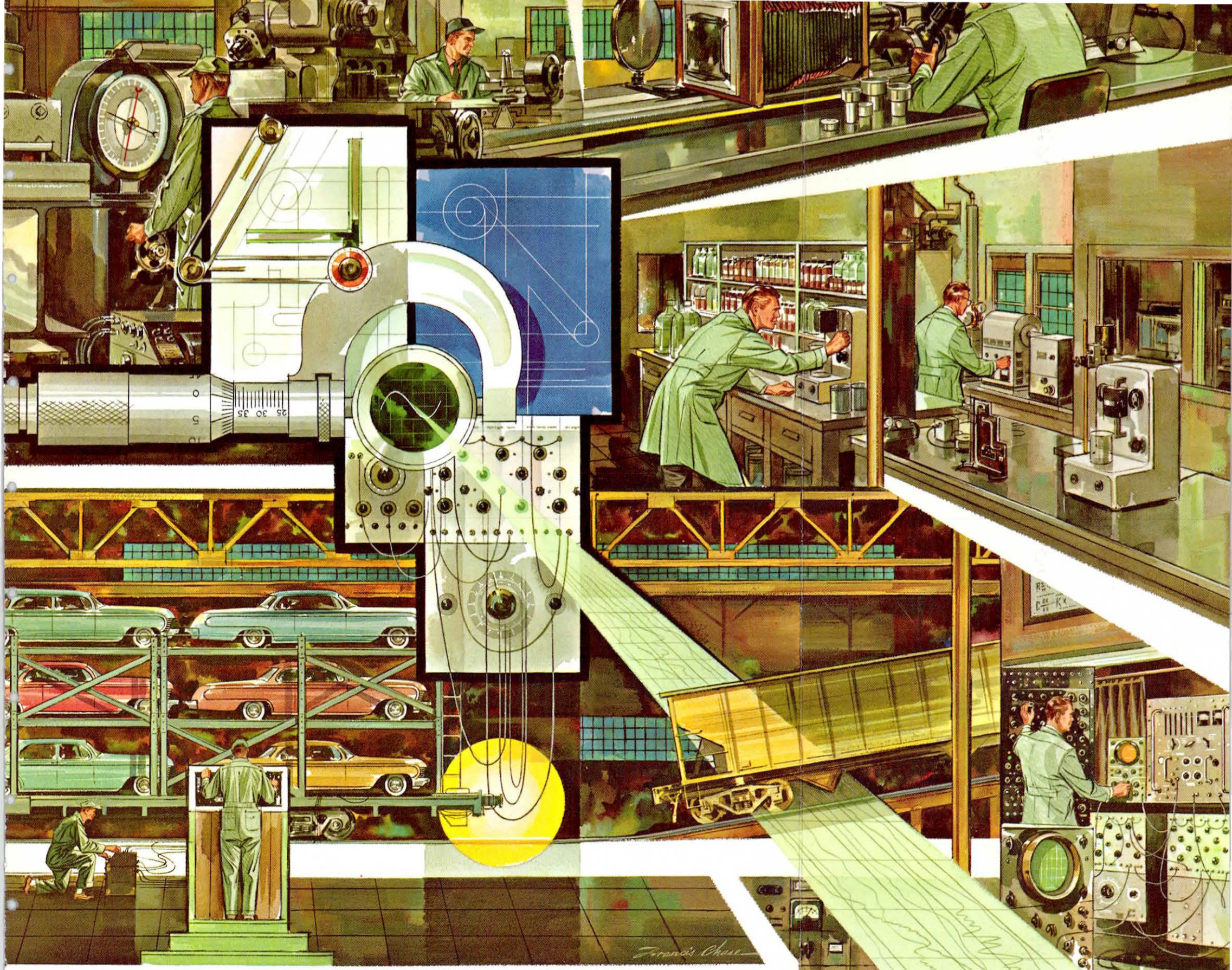
First the carriers swung back to their 1959 demands, in an effort to avoid a prolonged court case. The organizations sought to file amendments to their complaint to cover the switch. They wound up with a dismissal of their suit by Judge Perry, on the basis that the carriers had not in fact violated the Railway Labor Act in their conduct of the work-rule case.

In the exchanges in court—involving Judge Perry, carrier counsel Howard Neitzert and union counsel Lester P. Schoene—a number of significant points came out.

Judge Perry, at one stage, noted that the courts have no authority to grant injunctive relief if both parties have acted within the framework of the RLA. After the withdrawal of the NMB from the dispute, he pointed out, "both sides are free to rely on self-help and engage in economic warfare," restricted only by Section 10 of the Act (the emergency-board provision). The judge also noted that "neither party is required to request the President to appoint such a board, nor is either party prohibited from making such request . . . None has been made in this case."

Later, the organizations sought to show that the carriers' action would, in effect, repeal the Railway Labor Act by saying "there will be no rules." Union attorneys also contended that the Act compels carriers to make

(Continued on page 40)



P-S

PULLMAN-STANDARD RESEARCH AND DEVELOPMENT CENTER, HAMMOND, INDIANA

At this largest facility of its kind in the railroad industry, initiative, inquisitive minds and scientific instruments work together toward better, more functional, more durable railroad rolling stock. Here, at R&D, new ideas for advanced transportation and materials handling systems are born. Special designs for particular needs are developed. Design improvements are accomplished and full-size production models are tested and proved. This dedication to helping railroads obtain equipment based on modern industry and shipper requirements has helped earn research-minded Pullman-Standard its reputation as a designer and builder of the finest in railroad rolling stock.

FROM RESEARCH-MINDED PULLMAN-STANDARD . . .

PRODUCTS TO BETTER SERVE THE RAILROAD INDUSTRY

At Pullman-Standard, rolling stock concept and design are in the hands of specialists experienced in every phase of railroad car development. Equipped with the carbuilding industry's most complete and modern facilities ranging from electronic computers to full scale car impact ramps, the P-S Research and Development Department makes doubly sure each new type of car and construction improvement deserves the name "Pullman-Standard."

TO PROVIDE MAXIMUM LADING AND EQUIPMENT PROTECTION . . .

THE P-S HYDROFRAME-60®

Some years ago, Pullman-Standard set out to really solve the lading damage problem that costs the railroads over $100,000,000 annually. In 1952 an 8", and later a 10", travel cushion underframe was developed. Both resulted in greatly reduced impact forces at the coupler, but service experience showed that this did not result in a correspondingly large reduction in lading damage. Reductions in coupler forces alone were not the answer.

Studies were made to explore extensions in cushion travel and although further large reductions in coupler forces were neither expected nor found, a new fact was demonstrated. Lading forces, and consequently lading damage, were sharply reduced as travels were extended beyond the previous 8"-10" range. Optimum protection occurred in the neighborhood of 30" of travel. Cushioning in this range was so effective that fragile lading could be protected even at unusual, near collision level impact speeds. This discovery led to the now famous P-S Hydroframe-60 cushioning, covered by U.S. Patent 3,003,436.

With the P-S Hydroframe-60, 100% claim free shipments are commonplace, but this may be just the beginning. New car designs using the P-S Hydroframe-60 may incorporate ready adjustability, "tailoring" protection to load-weight on all types of rolling stock.

And, Hydroframe-60 cushioning which reduces car body forces has already opened the door to a new box car design featuring a full 50'-6" side opening, to cushioning of piggyback flat and container cars, and promises whole new areas of rolling stock innovations.

TO SOLVE CLEARANCE PROBLEMS AND INCREASE REVENUE . . .

THE P-S LO-DEK FLAT CAR

In the early 1950's piggyback rail cars were merely flats converted for this type of service. As the piggyback concept grew and trailer length expanded, Pullman-Standard recognized the need for cars that would carry two 40' trailers. This lead to development of the 85' PS-4PB, the first all-steel flat car specifically designed for piggyback service.

Although popularity was immediate, and the PS-4PB soon became the standard of the piggyback fleets, its use was restricted when truckers began extensive use of 13'-6" high trailers, too tall for many eastern tunnels and bridges. Simultaneously, auto transporting began returning to the rails with new racks and carriers requiring high clearances.

In 1959, to make tall-trailer piggyback and auto rack service nationwide, Pullman-Standard took the initiative in developing a low-profile flat car, the P-S Lo-Dek that could carry 13'-6" trailers or three level auto racks anywhere.

The P-S Lo-Dek Flat Car has the lowest deck (31"), greatest length (89'-4"), lightest base weight (48,000 lbs.), and more Lo-Deks are now in service (over 2,000) than all other so-called "low-profile" cars combined.

It accommodates all popular, standard, trailer stanchions, auto racks, and container racks, and—even now—is being further improved to meet changing and future piggyback requirements. This is typical of the rolling stock development and improvements research-minded Pullman-Standard is famous for.

TO DEVELOP NEW TRANSPORTATION METHODS . . .

THE P-S CONTAINER CAR

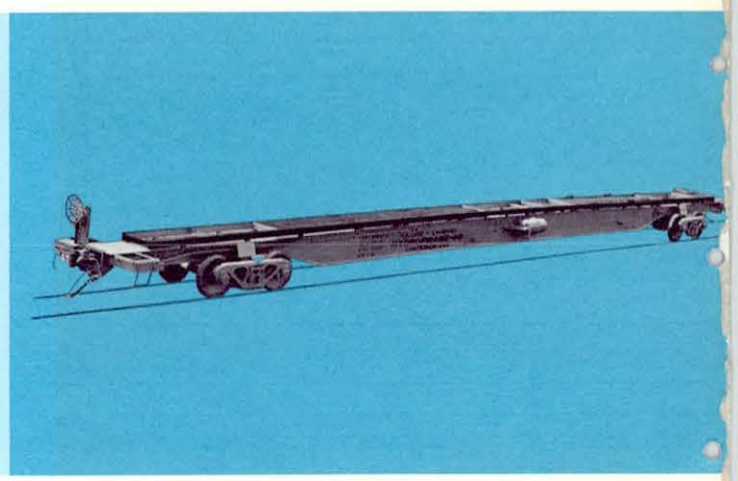
An example of P-S Research and Development for tomorrow's shipper requirements, is the work being done in designing and testing cars for transporting containers.

So new is this field, studies were started only four years ago. But, unlike other approaches involving modification of standard equipment, function has dictated the basic design of Pullman-Standard's concept.

One design of P-S Container Car consists of a center sill supported by two sets of trucks and with a 39" wide I-beam frame upon which containers rest. This car has a capacity of 130,000 lbs. and can be equipped for passenger train head-end service and with Hydroframe-60 cushioning. Variations in frame design and hold-downs permit transporting from two to sixteen container units.

Additional P-S Container Car designs provide for carrying one long container, auto racks, etc., and these cars will be available in either standard or low-level height.

Further, Pullman-Standard is working to simplify methods for handling containers to and from the car with the ultimate goal of helping railroads become swift and sure "conveyor lines" from shippers to consignees.



®Trademark Registered

These are just a few of today's advanced Pullman-Standard freight car innovations for more efficient rail transportation—modern rolling stock that is setting the pace in the railroad industry. The million-plus dollars P-S budgets annually for Research and Development is the largest appropriation of its kind in the carbuilding industry.

PULLMAN-STANDARD

A DIVISION OF PULLMAN INCORPORATED
200 SOUTH MICHIGAN AVE. • CHICAGO 4, ILLINOIS
BIRMINGHAM • PITTSBURGH • NEW YORK
J. C. FENNELLY CO., SAN FRANCISCO REPRESENTATIVE

TRAVELIFT crane places a track panel at the end of the track it is building in new Erie-Lackawanna classification yard at Buffalo. The assistant foreman sights ahead on stakes set by construction engineers to check alinement.

E-L Travelift Speeds New Yard Track Job

► The Story at a Glance: Having 25 miles of single main track to take up, the Erie-Lackawanna decided to remove it in track panels with a mobile crane. When this track program was temporarily delayed, however, the road moved the crane unit to Buffalo and put it to work loading and laying track at the new classification yard which the E-L, and the Nickel Plate, are constructing jointly at that point.

Two types of cranes are being used by the Erie-Lackawanna for building new tracks in the electronic hump-retarder classification yard which is under construction at Buffalo. One is a conventional locomotive crane and the latter is a Travelift, Model SPL-12AX.

The Travelift was purchased this year for the purpose of taking up 25 miles of single main track, which had been retired from service on the E-L's Wyoming and Bradford divisions. The track to be recovered was earmarked for a grade-elimination project on the road's Niagara Falls branch. However, since this work had not progressed to the point where the track could be relaid, it was decided to use the Travelift for expediting track construction in the new yard.

The material for the new yard tracks is being obtained from two sources: (1) Existing yard tracks of the former Lackawanna yard that must be removed to make room for the new tracks at a different grade, and (2) the retirement of the former Lackawanna's double main tracks, through coordination prior to merger, between Binghamton, N.Y., and Gibson yard near Corning, a distance of about 62 miles.

To enable the grading work for the new yard to progress without delay, it is necessary to remove the tracks of the former Lackawanna yard promptly. These tracks are being removed in the form of panels which are loaded six-high in gondola cars and hauled to the point in the yard where the new tracks are being constructed.

Other track panels for use in building the yard are being made at a fabrication site at one end of the new yard, utilizing material recovered from the 62 miles of retired main track. This track was dismantled rail by rail, and the 130-lb portion of it, consisting of rail, bars, plates and ties, was loaded and shipped to the track-panel fabrication site at Buffalo. The ties are loaded in bundles of 20, which is the number used for each track panel.

At the fabrication plant, 20 track panels are built at a time on a template that facilitates the spacing of ties and rails. This plant produces an average of 40 panels of completed track per day. These are loaded daily six-high in gondola cars, and are hauled to the point where the new yard tracks are being constructed.

In laying the panels to form the new tracks the conventional locomotive crane uses two tracks, one for the cars loaded with track panels and the other for itself. The Travelift occupies only the track it is building, and, since the outside distance between its pneumatic tires is 19 ft 9 in., it can lay new track at 13-ft track centers. As the E-L is using Travelift, however, it is building track in advance of the one being constructed by the locomotive crane. Hence, the track it is building is on 26-ft track centers with the last constructed track.

The same number of men are employed with each panel-laying crew. A bulldozer is assigned to each crew for the purpose of smoothing out any irregularities in grade, squaring up the ends of the panels as the work progresses, maintaining line, and for moving the panel-loaded cars forward as the work progresses to shorten the travel distance of the crane.

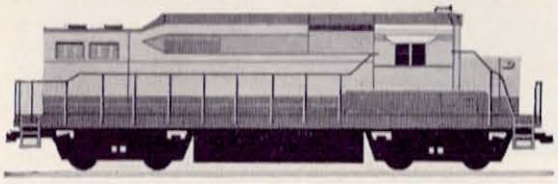
The Travelift has been laying an average of 42 panels (7 cars) per day, or about one-third of a mile of track. The locomotive crane lays about the same amount.

When the straddle crane has served its purpose at Buffalo, it will be used for picking up the retired single track. Although final plans have not been worked out, the procedure will be something like this:

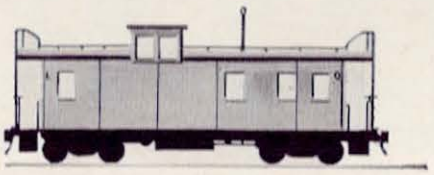
A crew comprised of an assistant foreman, machine operator and six laborers will first square up the joints to form track panels, covering about one mile per day. Two power wrenches will be used, one for unbolting and the other for rebolting one bolt per joint. A tractor will be used to pull one of the rails forward to square the joints, and four laborers will restore the bars as well as knock down the tight ties which resist rail movement.

The shoulders of the ballast and roadbed section will be plowed down to permit the Travelift, with its wheels at about 17.5-ft centers, to straddle the track without sliding one way or the other and thereby crowd the cars being loaded. The straddle crane will then lift a track panel and carry it back to a gondola car. A locomotive crane also will be used and will move the train of cars as well as lift the Travelift, which weighs about 7 tons, over bridges. It is anticipated that 48 track panels will be loaded daily by this method.

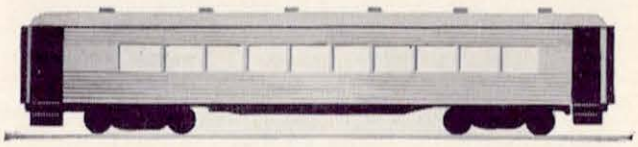
EXIDE BATTERY ECONOMY IS FOR EVERY KIND OF CAR OR LOCOMOTIVE



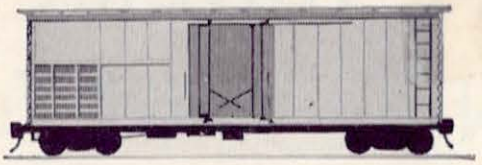
DIESEL LOCOMOTIVE



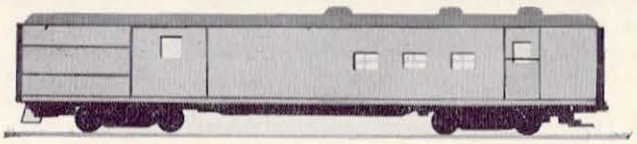
CABOOSE



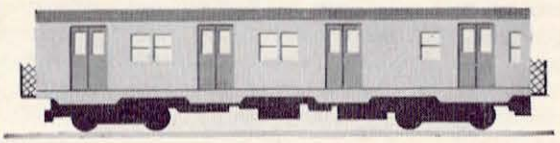
PASSENGER CAR



REEFER



HEAD END CAR



SUBWAY CAR

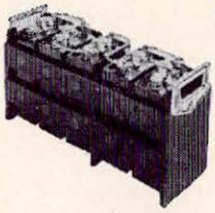
Different applications have different battery requirements. Only Exide can meet varying requirements so well. Because Exide offers the broadest range of battery sizes and types. Exide's power package includes battery and service. Write for literature. Exide Industrial Marketing Division, The Electric Storage Battery Company, Philadelphia 20, Pa.

Exide® INDUSTRIAL MARKETING DIVISION
THE ELECTRIC STORAGE BATTERY COMPANY ESB

DIESEL

Exide-
Ironclad

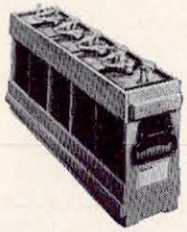
PASSENGER CARS



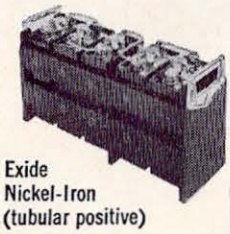
Exide-
Ironclad

Exide Nickel-Iron
(tubular positive)

HEAD END CARS

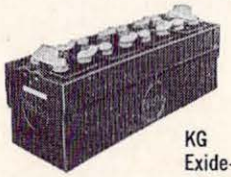


Exide
Nickel-Iron
(tubular positive)



CABOOSE AND REEFER
(12 or 24 v)

Exide
Nickel-Iron
(tubular positive)



Exide
Nickel-Cadmium
(pocket positive)

KG
Exide-Ironclad
(low profile)

Exide®

RAILROADING AFTER HOURS WITH JIM LYNE

ONE-MAN TRAIN CREWS—I have been dipping into the interesting report on railway operation in Europe prepared by the U.S.A. delegation that made this overseas tour under AAR auspices a couple of years ago. The feature of operations there that strikes me as most significant is the way they get along without overmanning their trains; and their consequent ability to operate short trains on more frequent schedules without prohibitive expense. In the Netherlands, for instance, freight trains of no more than 15 cars are operated with a crew of only one man, the engineman. No freight train has a crew in excess of two men—one engineman and one trainman.

There does not seem to be the same strict separation of crafts as we have, either. In France, for example, during slack periods enginemen can be assigned to repair work in the shops. Economical operation on our continent is geared to the heavily loaded train, with a squad of men in the crew—a method based on tradition, rather then on inherent conditions.

Railroad service to shippers could be made a lot more attractive than it is, if our railroads could afford to run shorter trains more frequently, which would be possible only if overmanning were not required.

FRIENDLY APTLY NAMED—Circuit Judge Henry J. Friendly has an article in the Harvard Law Review for May on the ICC's use of its regulatory power over minimum rates that I hope the Commissioners will read. The "long-run out-of-pocket cost" of the ICC's cost finding section, the judge believes, includes many items that do not belong in the out-of-pocket category and "omits only a few needed for a full distribution."

The judge also clearly understands that some rates that would not meet the "fully distributed" level may, by attracting added traffic, make a greater contribution to fixed costs than higher rates would. Thus, he pulls the pin on the argument that rates not covering "full" costs are a "burden" on other traffic. They are a boost, not a burden, to other traffic if they increase a railroad's net earnings.

Judge Friendly strikes me as showing deeper understanding of this problem than some ICC members do; and more, perhaps, than some of his colleagues on the bench.

WHERE TAXES HURT MOST—I know plenty of people who believe (along with me) that income taxes, corporate as well as personal, are too high, but I seldom hear what, to me, seems to be the most important objection to them. This is the attraction they exert on clever minds to discover "angles" for reducing the take. If all the brain-power now devoted to tax-angling could, instead, be diverted back into increasing the quality and quantity of production, we would all be better off. This includes the tax collector, because a big percentage cut on a modest income is likely to be a lot less money than a modest cut on a big income.

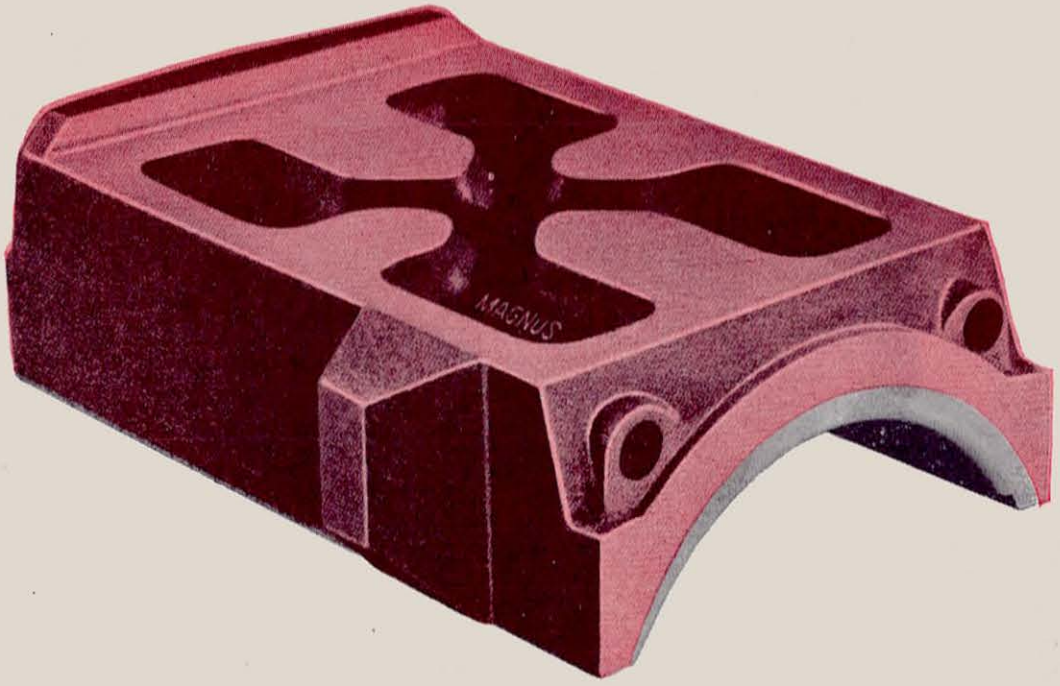
NEODESHA AND WICHITA—I was reading on our "People" page the other day about an official appointment on the Frisco at Neodesha, Kans., and I got to wondering how many people, except those in that part of the country, would have any idea how the name of that town is pronounced. It doesn't rhyme with Wichita, or Topeka, or Pembina—but it does rhyme with Chickasha.

'MOVING THE DIVISION'—One of the principal products of the grapevine way back yonder used to be the rumor that "they're moving the division" from where it was to some little one-horse junction 50 miles down the line. This would mean, if true, that employees would have to move to a place where housing was scarce, and sacrifice their present homes at fire-sale prices—because property in a "railroad town" wasn't worth much when the "division" moved away.

Of course, this calamity seldom really happened. What did happen, too often, was that the division didn't move—it just dried up. The brothers were foresighted in protecting themselves against the division-moving danger, but they were somewhat less attentive (and in this omission they had plenty of company) as to what this country's peculiar system of highway finance was going to do to almost all small towns.

People in all these little towns flocked to the polls to vote for highway bond issues "to take Podunk out of the mud." They little realized that they were also voting for Podunk's extinction.

MAGNUS FLAT-BACK BEARINGS...



the LOW-COST way to stabilize journals and get still better freight car performance

Today, freight cars with lubricators average better than four times the performance with waste packing in 1954—and cost per car per year for journal bearing operation and maintenance has been cut more than half. Better still, total costs for *solid* bearings today are less than the fixed charges on the extra investment in roller-type bearings.

The next big step toward improved performance is the *flat-back bearing*—available from Magnus to AAR specification and design, in nominal and step-sizes. It effectively restricts fore-and-aft movement of the journal under all normal operating conditions—makes it possible for the bearing to remain seated on the journal and to provide uninterrupted lubrication.

Several leading railroads are applying flat-back bearings to all new standard interchange freight cars. One railroad is converting existing equipment to flat-backs at repack periods.

Flat-backs prevent excessive journal displacement—increase the efficiency and service life of present-day rear seals. They require no additional labor to install and, through improved performance, can quickly pay for the slight extra cost.

CURRENT ECONOMICS OF SOLID BEARING OPERATION

New economic study updates AAR Report 20,000 insofar as it covered solid bearing costs in 1954—shows how lubricators have cut these more than half despite increases in wage rates and material costs. For your free copy, write to: Magnus Metal Corporation, 111 Broadway, New York 6, N. Y. or to 80 East Jackson Boulevard, Chicago 4, Ill.

MAGNUS

METAL CORPORATION

Subsidiary of

NATIONAL LEAD COMPANY

RICHARD M. BOYD
Director of Traffic
and Transportation
Pittsburgh Plate Glass Company

"For Many Years Shippers Have Benefitted From Reading Railway Age" . . .

"The Freight Traffic issues of RAILWAY AGE provide an effective contribution to the knowledge of industrial traffic management. They consistently contain articles of timely interest with respect to developments in the transportation field, particularly in railroad operations. By regularly reading this publication, those engaged in industrial traffic work are able to keep abreast of progress in railroad operations and technique.

"The magazine also provides a forum for discussion of topics of current interest in the field. The traffic polls are particularly interesting in this regard.

"For many years shippers have benefitted from reading Railway Age. It occupies a pre-eminent place among trade periodicals."

ANNOUNCING THE NEW BOWER "RED CAP" JOURNAL ROLLER BEARING. LET THE "RED CAP" CARRY YOUR LOAD. BOWER IS A PIONEER OEM SUPPLIER OF BEARINGS FOR TRUCKS, EARTHMOVERS, AND OTHER HEAVY-DUTY EQUIPMENT. CALL OR WRITE TODAY. 3040 HART AVENUE, DETROIT 14, MICHIGAN.

BOWER ROLLER BEARINGS

DIVISION OF

FEDERAL MOGUL BOWER BEARINGS INC

Are Canadian roads 'less safe'?

Is attrition the best answer?

How have other unions reacted?

What lessons can the U. S. learn?

Canada's Firemen-Off Story

The fireman-helper issue is dead in Canada. Top officers on both Canadian Pacific and Canadian National are satisfied that the point has been proved: Firemen are not needed on yard and freight service diesels. The BLF&E's arguments for retaining the fireman—arguments which forced two strikes on CP—have been exploded by the Canadian roads' experience in operating with just an engineer and a headend trainman in the cab

Step by step, point by point, the record—on CP since 1958, on CN since 1959—lends weight to U. S. roads' determined attempt to remove firemen from diesels in yard and freight service.

Experience confirms what CP and CN contended all along—that the fireman was a redundant employee, not needed for lookout duty, signal passing, mechanical assistance, relief of engineer or any other purpose.

Further, Canadian experience shows that the absence of a fireman has no discernible effect whatever on the safe operation of trains. This is a particularly significant point, since the firemen's union leaned heavily on the safety angle in fighting the case in Canada and continues to play it up in the current U. S. dispute.

Both Canadian roads have made exhaustive studies of train accidents in the years since the fireman started coming off. Neither road has found a single accident which in any way could be attributed to the absence of a third man in the cab.

CP figures, for example, show almost no difference between with-fireman and without-fireman operations in frequency of accidents or incidence of casualties. CN's experience has been similar.

Over the period 1959-61, Canadian Pacific studied 336 freight and yard mishaps in operations where a fireman was on board the engine. Based on the number of assignments worked during the three years, CP had one accident per 3,987 operations, for a .025% rate. The same period recorded 10 mishaps involving trains operated without fireman—and the rate was almost identical: one accident per 3,689 operations, or .027%.

Operations without firemen actually show a better record so far as casualties to employees were concerned—and the rates are identical, with and without firemen, when casualties involving non-employees are considered.

The 1959-61 period produced 774 accidents involving employee death or injury (disability in excess of three days) in cases where firemen were employed. The rate: one casualty per 1,731 operations, or .0577%. Operations without firemen, however, showed only 14 accidents resulting in casualties. The rate: one casualty per 2,635 operations, or .0379%.

BLF&E arguments have made much of the fireman's role in preventing injury to others. (The term "others" includes all persons except employees and passengers; casualties are injuries resulting in death or disability in excess of one day; accidents include, of course, injuries to trespassers and persons in automobiles in grade crossing mishaps.) Alert, often heroic action by firemen in saving "trespassers," for instance, has been cited frequently. But CP's experience doesn't find this of major importance. The three-year period showed 109 such accidents involving trains employing firemen—and only three where the operation was conducted sans fireman. The rates are identical, with or without fireman—.0081%.

For a variety of reasons, neither CP nor CN has been able to take full advantage of fireman-off agreements with the BLF&E. As matters stand now, it's likely that some firemen will still be working yard and freight service assignments for perhaps 10 years. In the meantime, of course, no new firemen will be hired (unless needed for passenger assignments) and the ranks of the yard-freight firemen will be thinned steadily by promotions, transfers, retirements and deaths.

At present, most assignments on both roads are being run with firemen. Declines in freight traffic volume, completion of dieselization and reductions in passenger operations have all contrib-

CANADIAN EXPERIENCE shows that absence of a fireman has no discernible effect on safety of operation.

uted to a slowing of the attrition rate among firemen.

Highest percentage of without-fireman runs on CP so far, for example, is the 4.15% recorded in 1959, when 18,707 out of 451,300 assignments were operated with only an engineer and headend brakeman on the locomotive. The percentage has declined since then—2.26% in 1960 and 1.65% in 1961. Out of a total of 1,376,380 assignments, 36,890 trips or tours of duty were made without fireman for a 2.68% average for the three-year period.

Canadian National's record is much the same. A drop in traffic over the May 1, 1960-April 30, 1961, period resulted in fewer runs being made without firemen. But with a traffic pickup the following year, the number of fireman-less assignments rose. Over the three years May 1, 1959, to April 30, 1962, CN operated 37,515 assignments (28,569 yard, 8,946 road freight) without firemen. The rates: 3.27% of yard assignments and 1.03% of road operations conducted with two instead of three men in the cab.

Despite the slowing of the attrition rate and the consequent small percentage of fireman-less operations, both CP and CN can point to significant—if not, at the moment, impressive—economies made possible by the fireman-off agreements.

Canadian Pacific estimates its savings at about $900,000 to the end of 1961; Canadian National puts its figure at approximately $650,000 to April 30, 1962. Equipping all locomotives with deadman control and installing radio in engines in western territory—both permanent improvements—cost CP about $600,000. CN accomplished its changeover without capital expense. Deadman installations were recommended to the CP in the Kellock Royal Commission's report which formed the

basis for the original fireman-off settlement and the road itself proposed radio installations. But CN had the safety device in service when it started cutting firemen and the road doesn't view its continuing program of radio installations as tied to the firemen's case.

The savings—about $1.5 million overall—are significant in that (a) they have been made on a relatively insignificant number of runs made without firemen; (b) they've been made without any sacrifice in efficiency or safety of operation; and (c) they're indicative of the tremendous economies which can be made if and when traffic starts climbing again and the number of available firemen declines, as it must.

Actually, neither Canadian road made any major dent in the firemen's ranks when the fireman-off program began. Both roads were authorized to drop firemen with less than two years' seniority—but for CP that meant something less than 100 men; and for CN it meant none at all, since the road hadn't hired any firemen during the period involved.

Firemen who lost their jobs because of the fireman-off agreements were given preference for other railroad jobs —but neither CP nor CN got involved in any expense for retraining firemen to hold non-railroad jobs. (U. S. roads, attempting to drop firemen with less than 10 years' seniority, are offering to pay up to 75% of displaced employees' tuition costs, not exceeding two years, for ex-firemen who go back to school.)

Also, the Canadians had no problem —or cost—in meeting the personnel training "requirements" of running without firemen. There were none. As one officer, expressing the sentiment on both CP and CN, put it: "The headend trainmen now are not performing duties they didn't have before. There wasn't anything to teach the headend brakeman. He just carried on his normal duties. . . . We found that whatever the fireman was doing was either unnecessary or a duplication of work performed by someone else."

The smooth nature of the fireman-off operation, CP and CN found, is being reflected in the attitudes and reactions not only of other train service employees but also of the firemen.

Labor relations men have to stop and think a few moments to recall instances where engineers balked—even momentarily—at taking trains out without a fireman. In each of the few cases they remember, a brief chat with the engineman was all that was needed to set the operation straight again. Trainmen, CP and CN say, offered no objections whatsoever.

The history of the dispute (on CP, especially) indicated that this would be true. The first BLF&E strike, in January 1957, shut down the carrier for nine days. The second walkout, in May 1958 (after the Royal Commission report), didn't produce significant support from the other rail unions and CP operations weren't much handicapped during the three days the strike lasted before the BLF&E gave up.

By the time the second strike developed, railroad officers believe, employees in other crafts had come to believe that the fireman was in fact redundant and not serving a necessary function. That factor, plus Canadian laws regarding the crossing of picket lines by non-strikers, doomed the BLF&E's second walkout to failure. (Under Canadian law, persons not on strike have no legal right to refuse to cross picket lines unless they're threatened with bodily harm.)

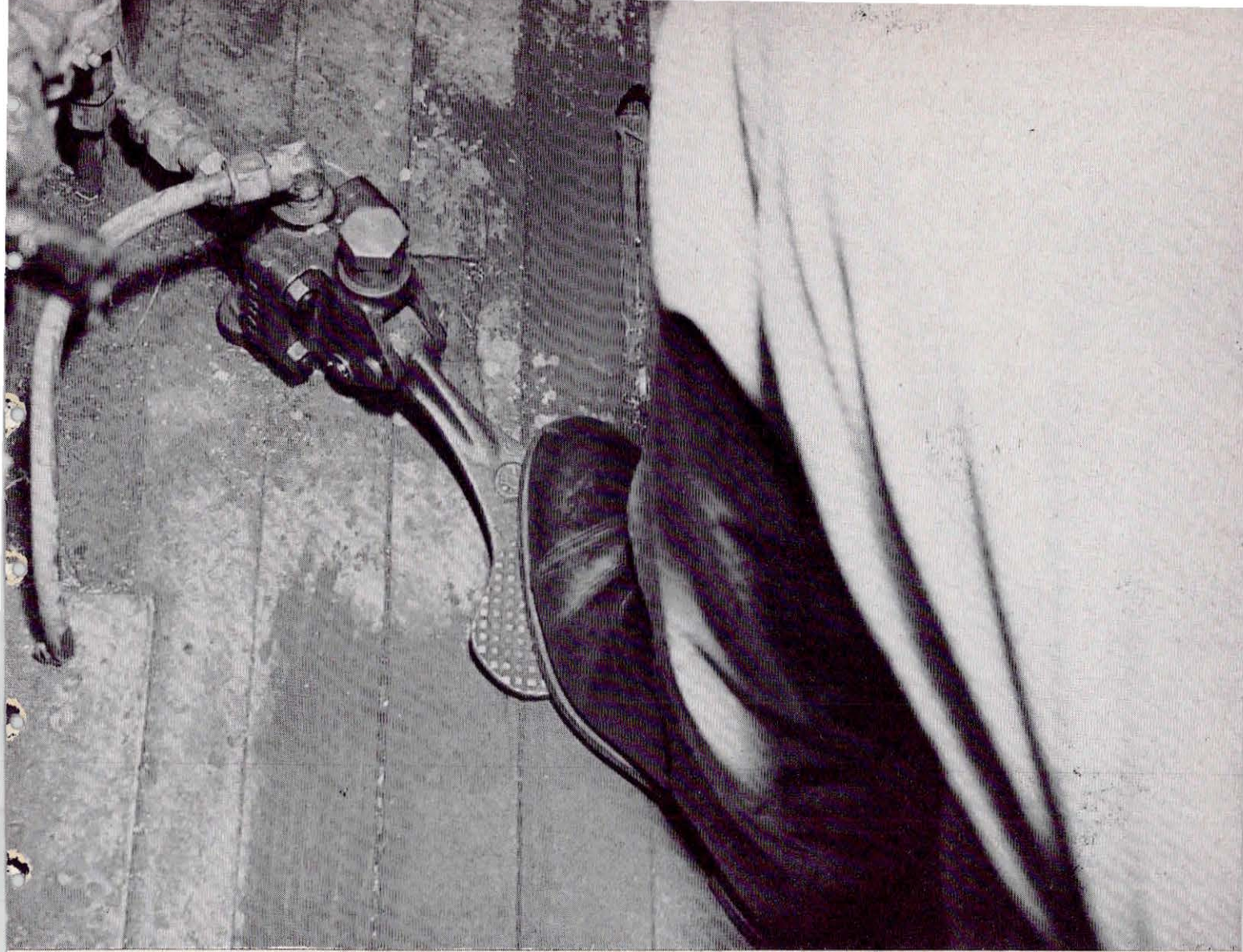
As for the firemen, the carriers are inclined to believe that the men have accepted, in large part, the status of the job in today's railroad industry. The issue has not been raised in recent negotiations. Also, firemen are starting to drift away from the railroad. In a number of cases, the roads have found that furloughed firemen who are recalled refuse to return. They've found steady jobs—with more hope of permanency—in other industries.

Like the current U. S. dispute over fireman-off demands, the Canadian scrap was a bitter and lengthy one. Unlike the U. S. roads, CP and later CN chose to concentrate on the single issue, rather than on a package of proposed rules changes. Canadian roads, by and large, have similar rules problems but they've found it satisfactory to seek improvements through the normal processes of negotiation and conciliation, step by step, one problem at a time.

Canadian Pacific first served a fireman-off notice in early 1956. By the end of the year, the BLF&E was set to strike. A Conciliation Board, in the meantime, had upheld (in a majority report) CP's position. Emergency conferences during the last week in 1956 failed to bring an agreement. On Jan. 2, 1957, the BLF&E struck. Nine days later, the walkout ended—and a Royal Commission was almost immediately appointed to investigate the dispute.

The Commission spent most of 1957 taking testimony and investigating. On Feb. 4, 1958, it issued its report—upholding CP's contention that the fireman was not needed and terming "fair" the carrier's plan for gradual removal of firemen. The railroad accepted the report; the union turned it down. From then until early May, the dispute simmered. Negotiations, climaxed by a

HEADEND BRAKEMAN continues to perform his normal duties in road freight and switching service. No change has occurred on runs without firemen.



DEADMAN CONTROL device has just been installed on more locomotives as a result of fireman-off settlement.

meeting between CP President N. R. Crump and BLF&E President H. E. Gilbert, failed to bring settlement. On May 11, 1958, the firemen struck. On May 13, it was all over. Canadian Pacific had become the first major road on the continent to press and win its fight to drop the fireman.

The following year, Canadian National won a similar agreement without a strike, though one was threatened.

And, of course, on Nov. 2, 1959, U. S. roads served their demands for sweeping changes in work rules, including removal of the fireman from yard and freight service.

The U. S. case has had some striking parallels to the Canadian situation—notably, the consideration of the dispute by a tribunal with the highest kind of credentials and prestige. In the CP case, it was the Royal Commission headed by Justice R. L. Kellock, judge of the Supreme Court of Canada (and this is believed to be the only instance on record of a Royal Commission's creation specifically to investigate a rail labor dispute). In the U. S. it was the Presidential Railroad Commission—also a body without precedent in rail labor cases.

The Royal Commission, of course, was a "neutral" body—three judges—while the PRC here was a tripartite group, with management, the unions and the "public" represented in equal portions. But, all neutral or one, one and one, the two commissions arrived at much the same decision (and the union has repeated its Canadian reaction in the U. S.)

Perhaps the major differences in the Canadian and U.S. situations involves the number of firemen to be cut and the timing. CP itself proposed the two-year cutoff which the Commission termed "fair," and added: "Had it not been made we might well not have gone so far to protect firemen from the consequences of loss of employment and seniority and we are unable to find any basis for recommending more generous terms."

Under the PRC report and the carriers' July 17 promulgation notice, firemen with less than 10 years' seniority would be dropped in a 3-stage operation over a 12-month period. Under the new carrier tactics—implementing the Nov. 2, 1959, notice—railroads would be free to drop all freight and yard service firemen. The former move would thin the firemen's ranks by 13,000 men in a year; the latter—carried to its most extreme extent—would cut 40,000 men off payrolls.

Canadians tend to regard even the 10-year cutoff with something resembling envy. They view their 2-year cutoff as "farther than we should have been required to go, by any rational process . . . but we realize we were breaking ground . . ."

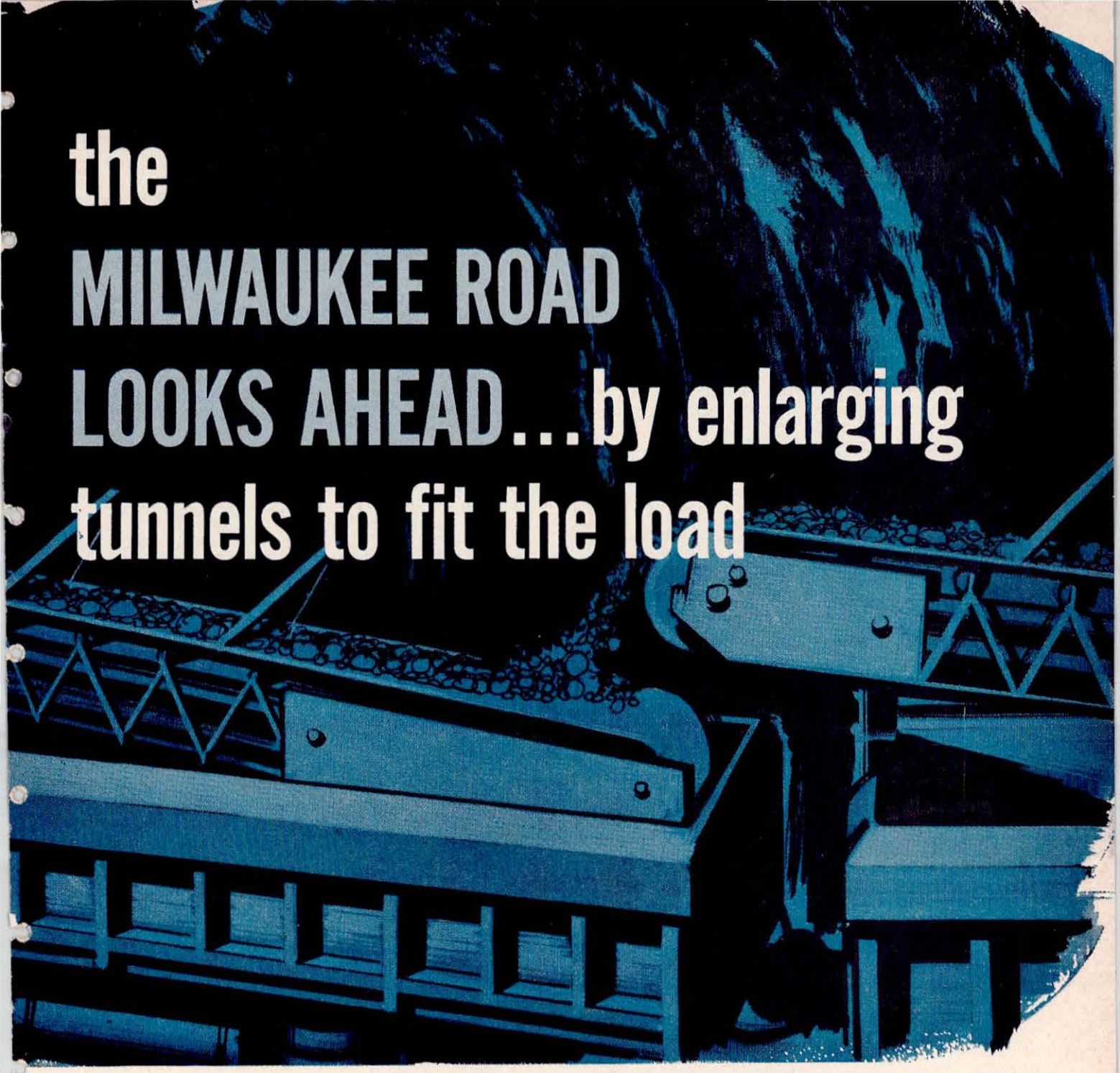
So CP and CN are in the position of veteran actors, sitting more or less in the audience—watching the unfolding of a drama whose lines they know well. Thus far—where the fireman issue is concerned—it's been a line-for-line playback. With the last act yet to come.

What happens when a railroad accepts an outsized load too big to go through a tunnel? Reroute the shipment or change the load? Not so with the Milwaukee Road—they change the tunnel. The result was that in late 1961, the Milwaukee Road finished lowering the floors in thirty-one mountain tunnels on their transcontinental main line. This involved tunnels in Montana, Idaho, and Washington.

The idea originated with the road's traffic and engineering officials. A study was made of the volume of triple deck auto-racks, and other new traffic moving over today's railroads. This included movement of large industrial ladings such as transformers, turbines, boilers, generators and even large prefabricated houses were studied. The results indicated that a project to lower tunnel floors was justified.

Construction techniques had to be devised so that the interruption of train schedules was held to a minimum. This meant close contact had to be kept with the division dispatcher. It was necessary to use two different methods of excavation. One involved the removal of material by a system of conveyor belts mounted on air-dump cars. The other called for removal of short sections of tracks followed by quick break up of the rock floor by a blasting and ripping operation. The loosened material was pushed out by bulldozers and the track was replaced in time for the next train to pass. Altogether seven miles of track was lowered from a minimum of 6 inches to a maximum of 24 inches. Whenever dust and fumes became a ventilation problem, the Milwaukee Road used its large snow blowers to maintain a satisfactory flow of fresh air.

the MILWAUKEE ROAD LOOKS AHEAD...by enlarging tunnels to fit the load



Undercutter and work train with belt conveyors mounted on top of dump cars carrying material out of tunnel.

In some instances, the equipment needed to do the job didn't exist. In these cases, the Milwaukee designed and built the specific unit in its own shops. With this unique planning and teamwork, construction went on at record speed.

This was truly a remarkable engineering accomplishment. Today, oversized loads are speeding to their destinations in the Pacific Northwest because of such ingenuity. The Milwaukee Road traffic and engineering departments have met the challenge of modern railroading.

American Oil Company is proud to be a part of the mighty transportation industry. We are especially pleased to serve the needs of the Milwaukee Road. We salute a company that is striving to improve its service and methods of expediting its customers' products.

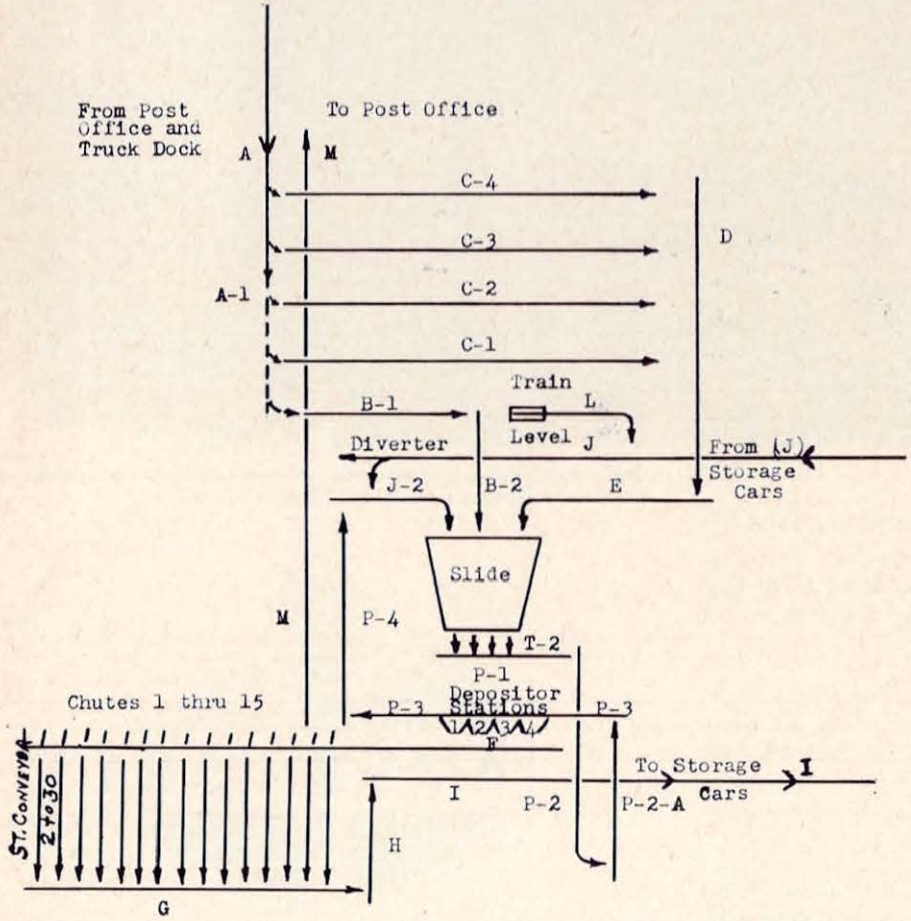
AMERICAN

AMERICAN OIL COMPANY

910 South Michigan Avenue, Chicago 80, Illinois

CODING OPERATORS press numbered buttons to key system with mailbag destinations.

L&N Automates Nashville Mail

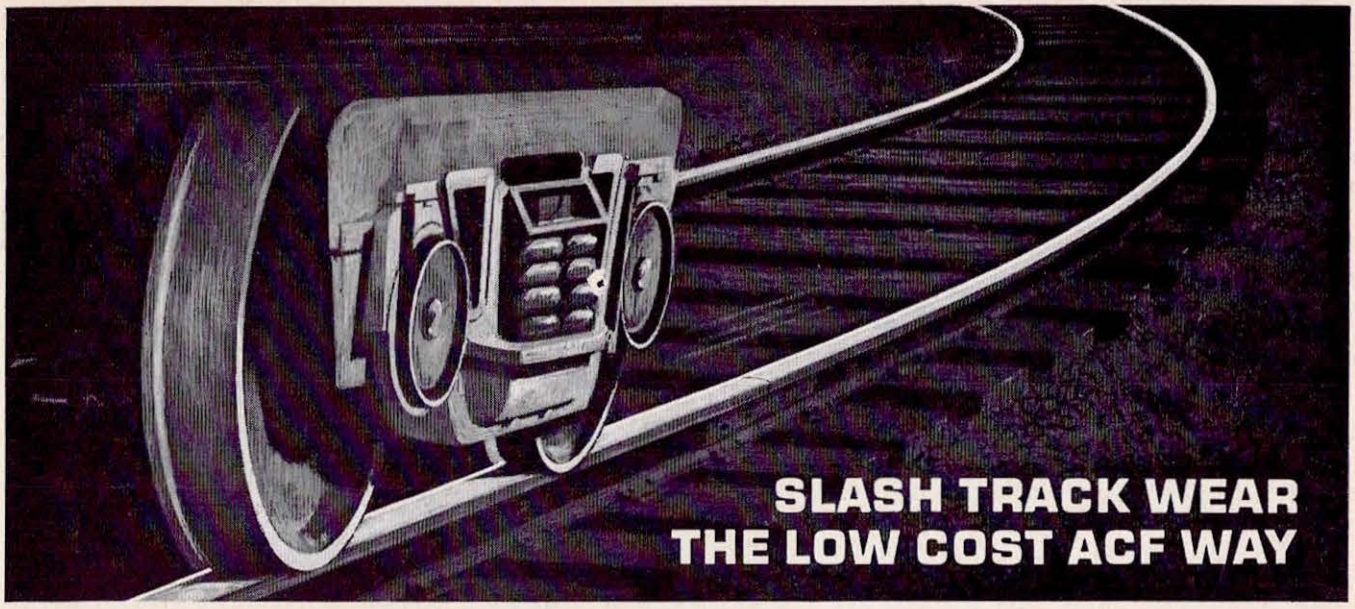


MAIL enters system at top, comes through slide to coding operators (depositor stations) and is distributed to areas G and I (at bottom of chart).

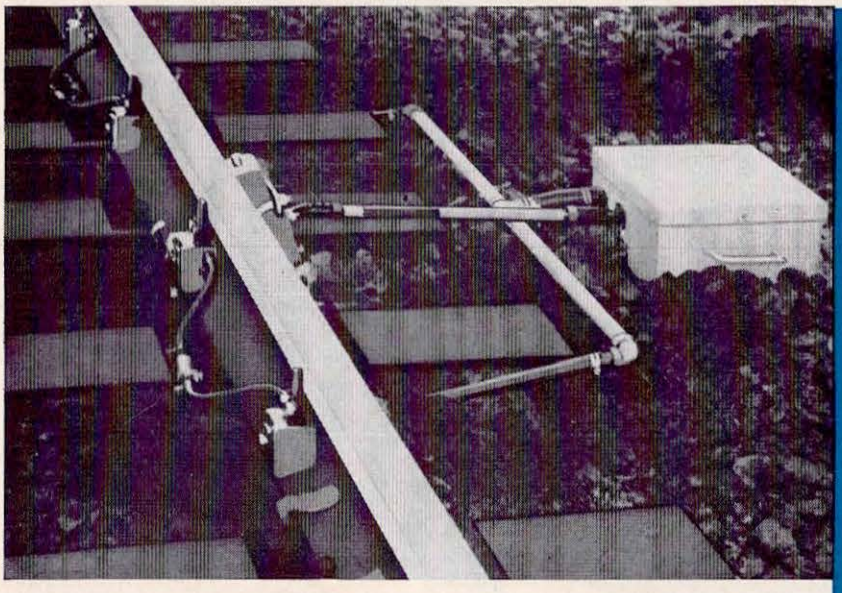
An automated mail handling system, with a normal capacity of 2,400 mailbags per hour, has gone into operation at the Nashville, Tenn., Union Station (RA, July 3, 1961, p. 14). Installed by the Louisville & Nashville at a cost of over $500,000, the new General Electric system is designed to handle sacked mail and beltable parcels. Employing about 3,000 ft of conveyor belts, the new facility moves mailbags or parcels from the Post Office (across the street from the station) to outbound trains; from a nearby publishing house to the station for loading into outbound trains; and from inbound trains for movement to the Post Office or for transfer to other trains.

Here's how the system operates: The A conveyor (see diagram at left) is the main input of the system and serves the Post Office, Baptist Sunday School Board (a religious publishing house), and three truck docks. This main conveyor moves mail onto shuttle belt A-1 which regulates mail flow to presort storage belts C-1, -2, -3, -4 or to sorting system B-1. From this point, mail passes across the center of the presort metering slide. When mailbags pile up too high on the slide, photocell beams are broken, which actuates controls to send incoming mailbags to the presort storage belts C-1, etc. Conveyors T-1, -2, etc., regulate volume of mailbags

(*Continued on page 36*)



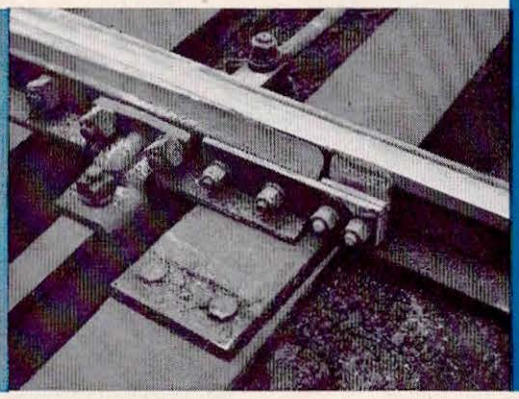
SLASH TRACK WEAR THE LOW COST ACF WAY



When you install the M&S Grease-Type Rail Lubricator you can practically forget your friction problems. This inexpensive, low-maintenance unit is held in place with simple clip bolts and can be installed by one man. No need to drill holes in rail web or machine the under rail.

Through a simple adjustment you can set the Lubricator to dispense heavy, medium or light grease applications. And once set, its constant stroke plunger always discharges the same amount of grease, whether new or worn wheels are passing over. All of the M&S Lubricator's components have not only been time-tested and service-proved but are made from the highest quality materials and, wherever possible, in one-piece forgings. Lubricator blades, for example, are high carbon-high chrome steel to assure long life. Applicator blades are inexpensive and can be cleaned and replaced by one man in just five minutes. Except for routine maintenance, the inherently simple design of this device guarantees trouble-free operation for the life of the Lubricator.

Investigate the savings the efficient M&S Rail Lubricator can offer you. This is one unit which literally pays for itself.



M&S Switch Point Protector. This rugged unit is attached by simple clip bolts—no holes to drill. Easily-installed, replaceable alloy steel protector blades cost less than welding up switch points. The economical M&S Protector can even be used on mainline track since it is fastened to the switch point and clears wheel flanges when point is open. The M&S Protector fits right or left hand switches; available for Interlocking or Power Switches.

AMERICAN CAR AND FOUNDRY DIVISION ACF INDUSTRIES, 750 THIRD AVE., N.Y. 17, N.Y.
SALES OFFICES: NEW YORK • CHICAGO • WASHINGTON, D. C. • SAN FRANCISCO
CLEVELAND • ST. LOUIS • HUNTINGTON, W. VA. • BERWICK, PA. • MILTON, PA.

AMERICAN CAR AND FOUNDRY
DIVISION
ACF INDUSTRIES

American Car and Foundry Division
ACF Industries, Inc.
750 Third Ave., New York 17, N. Y.

Please forward literature regarding:

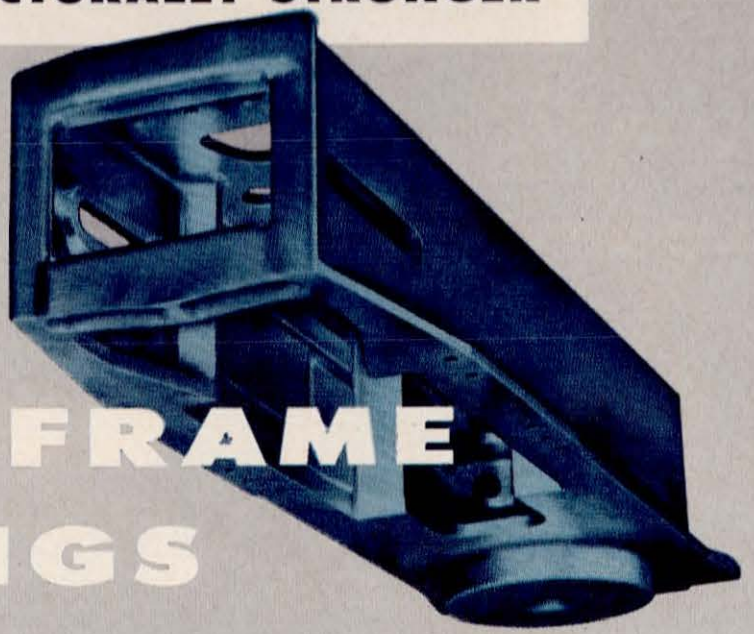
☐ Rail Lubricator ☐ Switch Point Protector

NAME.....

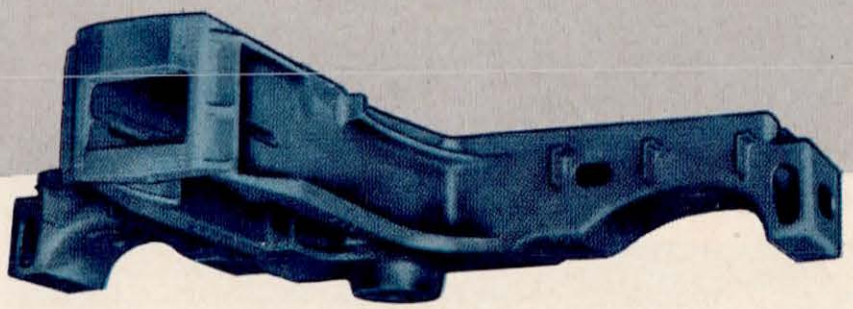
ADDRESS.....

CITY.....ZONE.....STATE.....

ACCURATE . . ECONOMICAL . . STRUCTURALLY STRONGER



Steel UNDERFRAME CASTINGS



Modern freight train service demands cars of rugged structural design to withstand greater impacts . . . and handle increased lading problems.

Since the original development of these underframe parts by Buckeye more than 30 years ago, service experience has proven invaluable in developing current designs which aid substantially in the reduction of maintenance in these critical areas.

Today, nine major railroads or car companies use these Buckeye structural units in freight car construction or repair. They find that rugged cast steel puts strength where it is required and that Buckeye designs are adaptable to diversified specifications. Cooperating surfaces are held to dimensional accuracy within A. A. R. tolerances. Both types of Buckeye units are particularly suited to simplify new or rebuilding programs and improve car structure to meet the rugged demands of today's accelerated freight handling.

Consult with Buckeye Sales Engineers on your particular program. No obligation, of course!

FOR COMPLETE INFORMATION . . . CALL or WRITE

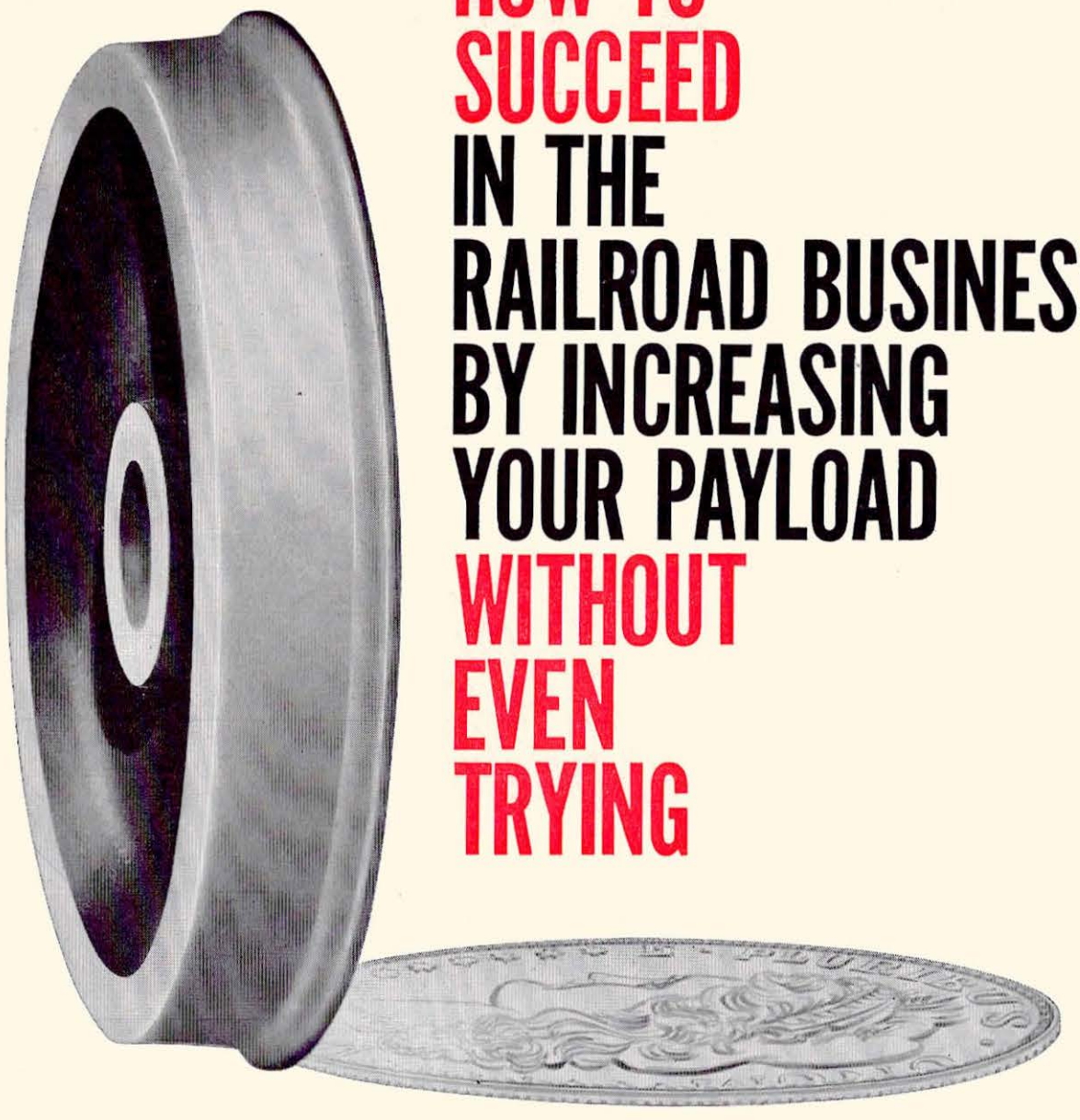
Refer Adv. No. 11890

The Buckeye Steel Castings Co.

COLUMBUS, O.
NEW YORK, N.Y.
CHICAGO, ILL.
ST. PAUL, MINN.
SAN FRANCISCO, CALIF.

ALLIED TO PROGRESS
RPI MEMBER

HOW TO SUCCEED IN THE RAILROAD BUSINESS BY INCREASING YOUR PAYLOAD WITHOUT EVEN TRYING



Succeed without trying? As easy as this . . .

A carset of Edgewater *wrought* steel wheels for a 50-ton freight car weighs 560 pounds *less* than wheels manufactured by a different method.

When you use Edgewater wrought steel wheels, you can put this 560-pound saving per car into payload or useful special equipment—where it pays!

WHY CUT YOUR CAPACITY TO HAUL?

Take this easy step along the road to success! Buy denser Edgewater wrought steel wheels. They do a better job, and weigh less.

For details, call your Edgewater representative, or write direct.

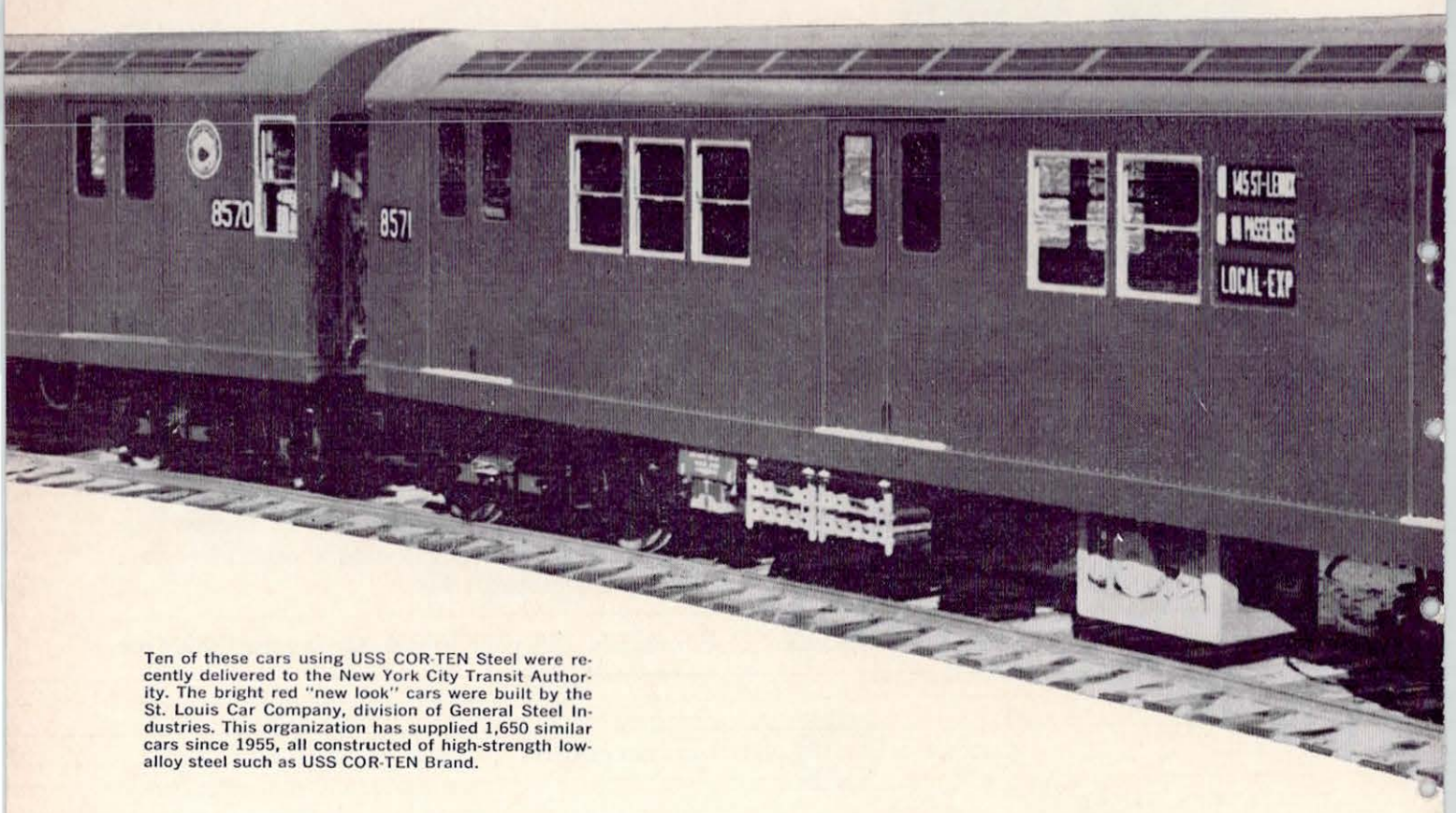
A SYMBOL OF WROUGHT STEEL *SERVICE-PROVED QUALITY*

RPI MEMBER

EDGEWATER STEEL COMPANY

P. O. Box 478 • Pittsburgh 30, Pa.

USS Cor-Ten Steel cuts weight, adds durability to 236 New York subway cars



Ten of these cars using USS COR-TEN Steel were recently delivered to the New York City Transit Authority. The bright red "new look" cars were built by the St. Louis Car Company, division of General Steel Industries. This organization has supplied 1,650 similar cars since 1955, all constructed of high-strength low-alloy steel such as USS COR-TEN Brand.

for *maximum* strength, durability, economy

Weight reduction was only one of the reasons designers chose a high-strength low-alloy steel like USS COR-TEN Brand for these 236 new subway cars built by St. Louis Car Company. They also wanted strong, durable cars that were safe, efficient to operate, and would require very low maintenance.

USS COR-TEN Steel is 50% stronger than carbon steel and offers 4 to 6 times the resistance to atmospheric corrosion. It holds paint at least twice as long as regular carbon steel.

Each of the cars uses about 16,000 pounds of this type of high-strength low-alloy steel in sheet gages such as 11, 12, 14, 16, 18 and in plates, structurals, bars and strip, which help reduce weight. Power costs go down with every pound of weight saved. The weight saved in these 236 cars quickly pays for the slight extra cost of the high-strength low-alloy steel.

Rolling stock maintenance is greatly reduced because of USS COR-TEN Steel's resistance to atmospheric corrosion. Most of the first subway and railroad cars built from USS COR-TEN Steel years ago and similar high-strength low-alloy grades are still in service.

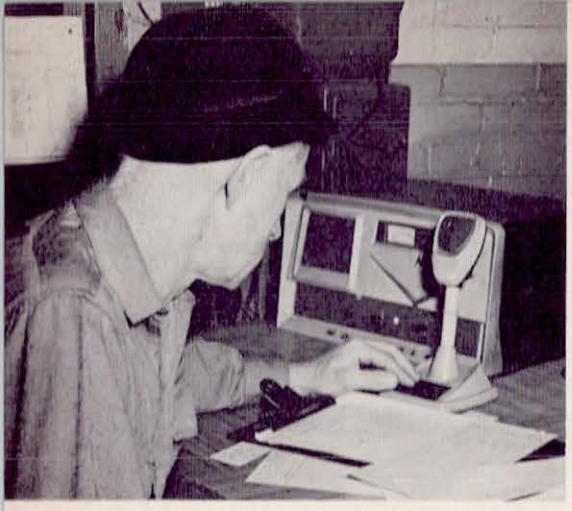
Other USS Steels that save money. United States Steel now has a complete family of weldable design steels with minimum yield strengths from 33,000 to 100,000 psi. A new covered hopper car built of USS TENELON Stainless Steel, for example, can handle any cargo from foodstuffs to chemicals because it can be kept *kitchen clean* with a simple washing between most cargoes.

For information or experienced metallurgical help in using our Family of Steels, write to United States Steel, 525 William Penn Place, Pittsburgh 30, Pennsylvania. USS, COR-TEN and TENELON are registered trademarks.

United States Steel Corporation • Columbia-Geneva Steel Division • Tennessee Coal and Iron Division • National Tube Division • United States Steel Supply Division • United States Steel Export Company

USS United States Steel

How EJ&E Uses Its 3-in-1 Radio System



TONE CODING permits yardmaster (above) to pinpoint messages to his own engine crews. Walkie-talkies with tone coding are also used. They permit private communication between supervisor and yard office. Footboard speakers (bottom) carry yardmaster's instructions direct to crew. Push-to-talk bar below loudspeaker is used for answer-back.

A special tone coding arrangement enables the Elgin, Joliet & Eastern to operate private radio systems in three yards on a single frequency.

"The arrangement, in effect, gives us three separate radio systems while at the same time integrating all three yards on a single optimum channel utilization," says Signal Engineer W. K. Waltz.

The tone coding is achieved through use of Motorola Private-Line radio equipment, which operates on 160.260 mc. The three yards in the radio network are South Chicago, Gary Mill and Whiting, Ind. Each yard has its own tone code so that a message transmitted from a base station or mobile unit is received only by other units with the same code. Key to the operation is a subaudible tone, which is transmitted along with each message and "unlocks" all properly equipped receivers. Tone codes used are: South Chicago, 179.9 cps; Gary Mill, 114.8 cps, and Whiting, 91.5 cps.

The tone coding of the radio, according to the EJ&E, provides maximum efficiency and utilization of the systems by eliminating the possibility of any mix-up in orders. It also enables men to work smoothly without being disturbed by messages not intended for them.

Main uses of the radio network, according to the road, are: (1) to provide for the safety of the men; (2) to expedite customer service and provide pinpoint scheduling; and (3) to handle emergencies swiftly.

"There is no possibility that an engine crew in another yard might respond to an order not meant for it," says V. M. Christensen, superintendent of the South Chicago division. "For example, we coordinate our 'hot metal' engines in both South Chicago and Gary Mill by radio. A Gary Mill engine crew might mistakenly take a radio assignment meant for a South Chicago crew. The results could mean delay in getting the job done, an engine crew wasting vital time going to the wrong job, and much general confusion. This cannot happen with tone-coding, for the Gary Mill men do not hear the orders for the South Chicago crews. We also eliminate the necessity of everyone listening to each and every message transmitted to make sure they don't miss anything for them."

Immediate and steady contact with engine crews enables the company to set up pinpoint scheduling programs. Timing is critical in hot metal work. When a furnace is ready an engine must be at the location as soon as possible. With radio, the yardmaster quickly contacts an engine to handle the assignment. This makes for improved customer service in all areas.

In case of derailment of a car, the wrecker unit can wait until the last possible minute before radioing for an engine to pull the car back on the rails. Previously, an engine often had to stand by until needed.

Instant radio contact makes possible fast aid in the event of any injury. The engine crew is able to radio a remote control point immediately to request first aid. "With this system we are also able to immediately reach a man to notify him of any important messages," Mr. Christensen explained.

Supervisory personnel use walkie-talkies to maintain constant contact with engines and the various offices. They can radio instructions and are always available to provide solutions to problems or be alerted to handle emergencies. The portables are also used when making air tests and for field observation work.

Installation at South Chicago includes a base station with four remote control points—the slab yard office, RP&O yards, assistant supervisor's office and hot metal yardmaster's office. Nine locomotives are radio-equipped. Of these, five are used for yard work, the other four are on the hot metal runs. The locomotives have radio control inside the cab and also on the front and back of the engine to provide the crew foreman with communication facilities. The South Chicago installation also includes a radio-equipped wrecker truck, a supervisory vehicle and five Handie-Talkie portable radios, used for field work.

The Gary Mill system ties in eight diesel locomotives with remote control points at the hot metal yardmaster's office, coke plant yard office and assistant superintendent's office. Three walkie-talkies are used by trainmasters. At Whiting, two locomotives are radio-equipped and controlled from one location. EJ&E has also ordered a number of spare radio units, including base stations for all three yards.

CUPOLAS on GN's new 30-ft steel cabooses were shop [illegible] as separate units. Walkover type seats were used to add to comfort of trainmen.

GN Builds Cabooses On Production Line

Mass production techniques were utilized by the Great Northern in building 15 new 30-ft steel cabooses at its St. Cloud, Minn., shops last month. All components, except roofs and running boards, were shop fabricated.

The cupolas, Standard Railway Equipment roofs, side sills, end walls, steel sides, steel cabinets, cellar boxes, body bolsters, crossbearers, trucks, center and sliding sills, generator and electrical assemblies, and bunks were all built or furnished as separate units. These components were then routed to 33 construction and seven painting stations on a 2,100-ft production and assembly line.

The sliding sills, which provide 10½-in. travel, are 41.2-lb, Z-26 sections enclosed in 31.8-lb, 13-in. channel fixed center sills. End sills, body bolsters and crossbearers are all-welded construction and consist of ¼-in. and 7/16-in. OH steel plate. The sectional side sills are short lengths of 15.3-lb, 6-in. channels welded to these units. The all-welded under-frame features the Waugh center casting, Waughmat WM-CG-4 draft gear and friction snubbing arrangement. Side sill angles are 5/16- x 4- x 6-in., and side posts are 3-in. 6.7-lb Z-bars. Steel ¼- x 3- x 3-in. angles are welded to the posts to form reinforcing members and window frames.

The cupola was fabricated with ¼- x 3- x 3-in. angles, and Youngstown S-281-W side plates were applied. Carlines are ¼- x 3- x 3-in. angles. Collision posts on both sides of end doorway are 6-in. 25-lb WF beams. All of this framework is covered with 0.10-in. copper-bearing steel sheets, seam welded with automatic Aircomatic gas shielded metal-arc using 0.045-in. welding wire.

On the caboose interior, Perma-Crete Ex-bond 100 was applied as an adhesive for securing the 3-in. Gustin-Bacon ultralite insulation, followed by building paper and ½-in. fir plywood side and ceiling panels. Floor construction consists of 0.060-in. anti-spark tin, 2-in. insulation, 1⅛-in. dead air space, 2- x 6-in. fir sub-floor, building paper, and a finish floor of 1- x 4-in. tongue and groove fir.

Trucks are 40-ton-capacity, Barber-Bettendorf swing-motion design for cabooses. Soft elliptic springs, 17,000-lb solid and 10,500-lb working load are used. Other specialties include Stucki roller side bearings, Premier lubricator pads, Creco unit brake beams, Wine Railway Equipment Co. brake balancers and Illinois Railway Equipment Economy journal stops.

Apex floor grating and brake steps are provided at the 30-in.-wide end platforms. Blaw-Knox running boards are used only on the main car body. Lift windows are installed at the conductor's desks in the B-R and A-L corners. The Met-L-Wood end doors are equipped with drop sash and screening. All other windows, except the cupola sliding windows, are fixed sash furnished by either Adams & Westlake or sealed with Inland's self-sealing weather strip.

Two 0.09-in. black iron metal cabinets flank the center aisle and house all electrical and radio equipment, the 420-amp batteries, clothes locker, a combination toilet and lavatory compartment, storage locker and a utility locker. A compartment in the 6-ft plywood bunk, mounted adjacent to the cabinets, provides access to the Safety Car & Heating Co. type AA-1500 generator which operates off an axle pulley through a series of C belts.

Other equipment in the cabooses includes 30-in.-wide cushioned seats and back rests in the B-L and A-R corners, Coach and Car caboose seats at the conductor's desks, a Vapor Caban 55,-000-btu oil stove, Gloekler ice refrigerator, an overhead tank for wash water, Safety No. 228-1 ceiling lights, platform spot lights and Walkover type seats in the cupola.

Principal Dimensions—Great Northern Cabooses

Length over coupler pulling faces, ft.-in.	41 - 7 1/4
Length over strikers, ft.-in.	39 - 1 1/4
Length over platform end sills, ft.-in.	36 - 7 1/4
Length over roof sheets, ft.-in.	36 - 6
Length over running boards, ft.-in.	38 - 3 1/4
Length inside, ft.-in.	30 - 0
Width over platform steps, side sills and side posts, ft.-in.	9 - 8 5/8
Width over cupola side sheets, ft.-in.	9 - 10 5/8
Width inside between plywood lining, ft.-in.	9 - 2 5/8
Height, rail to top main running board, ft.-in.	11 - 10 27/32
Height, ceiling in main car, ft.-in.	6 - 10 1/8
Height, rail over cupola side plate, ft.-in.	14 - 2 1/8
Height, rail over body side plate, ft.-in.	10 - 10 1/8
Truck centers, ft.-in.	23 - 2 1/2
Lightweight (estimated) lb.	56,000

Editors Afield

MONTREAL.—He who goes to Canada expecting to be able to pass along to Canadian railway officers a few choice news notes concerning the U.S. labor-management scene might as well stay home. Top officers and labor relations men on CN and CP are perhaps as well informed as their counterparts in the States on what's doing south of the international boundary.

Right now, they're watching with particular interest two mushrooming clouds in the U.S. One, of course, is the work rules dispute—because, after all, it was Canadian Pacific which pioneered the fireman-off concept and made it stick. (And Canadian National wasn't far behind.) The second is the job-freeze movement launched by the non-ops, notably the Telegraphers (who settled with SP and still are threatening to strike C&NW).

Actually, the Canadian roads—CN and CP and the smaller lines—could be precedent-setters again, in the job stabilization area. SP's settlement with the ORT was a one-road, one-union proposition which—witness the C&NW affair—hasn't yet been regarded as a pattern for all. But the Canadian lines are currently involved in Conciliation Board proceedings on a job-freeze demand made by all the non-ops. Specifically, the unions are demanding a freeze to the extent that the carriers may not reduce employment in a craft by more than 1% per year (which, compounded, like interest, makes the permissible 1% smaller each year). The organizations are also after a pay increase that works out to 22 cents an hour—but it's the job stabilization battle that's drawing the most attention.

Chances are the Conciliation Board will issue its report sometime around the end of August—after which the parties will try to work out an agreement based on the Board's recommendations.

While the Canadians wait for the three-man Board to hand down its non-op report, though, they're watching—with the fascinated interest of a World War II vet reading the Korean War news stories—the struggle going on over the fireman-off issue and the other work rules U.S. roads are trying to change.

There's some wonderment—or, perhaps, awe—that the American carriers took on everybody at once instead of concentrating on one issue at a time, as the Canadians did. And there's more wonderment that the Canadian success story hasn't been told more often, used more often from a public relations standpoint, to point up what Canada knows for a fact: Railroads don't need firemen.

They point out, for instance, that the two major Canadian roads rank 1-2 in mileage on the North American continent; that both CN and CP operate many, many miles in congested industrial areas as well as in sparsely settled country; that, perhaps, their grade crossing situation may be more of a problem—because Canadian highway improvements haven't matched those in the U.S.—than most American roads face. Yet, as the story beginning on page 22 of this issue indicates, the fireman-off program in the northland has been an unqualified success.

Canadian labor relations personnel, incidentally, are perhaps as familiar with the essential provisions of the U.S. Railway Labor Act as they are with the workings of their own Industrial Relations and Disputes Investigation Act. Actually, the two measures are more similar than different, with Canadian law also providing third-party "settlement" through the Conciliation Board procedure (there is no provision for an RLA-type proffer of arbitration, although the parties may agree to make Conciliation Board findings binding).

Time limits under the Canadian act are shorter than those under the RLA—14 days for the investigation and report of the Board after appointment of its chairman; and seven days from the time of the report until company or union can act to implement demands or strike. The investigation period can be extended by agreement of the parties or permission of the Minister of Labor. It usually is.

One other significant difference in the two laws lies in the term of contracts. U.S. procedure involves open-end contracts, unless a specific moratorium is written in. Canadian agreements are for a minimum one-year term.

—Gus Welty

AUTOMATED MAIL HANDLING

(*Continued from page 28*)

moving into the sorting area P-1, -2, -2A, -3. Coding operators (photo top of page 28) working adjacent to conveyor P-3, read the destination tags on the mailbags, and press numbered buttons on a keyboard for coding the system to send the mailbag to its proper destination. Almost simultaneous with reading of the destination tag, the coding operator pulls the mailbag toward him dropping it into a loading hopper, from whence it drops onto a conveyor belt. As the bag hits this conveyor, its destination code is put into controls that are synchronized with the conveyor's movement so that when the mailbag reaches its proper destination conveyor belt or chute, the controls actuate a gate which swings to push the mailbag onto its proper chute or destination conveyor. Mailbags which the code operators do not catch are returned to them via conveyors P-4 and J-2.

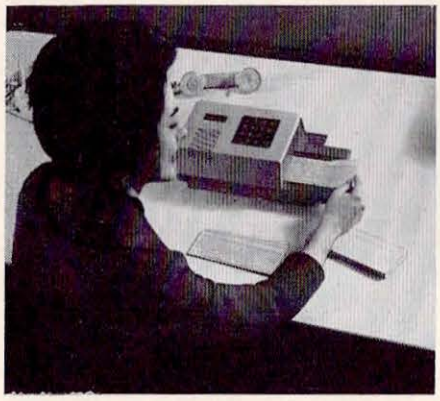
Conveyors J and L, also input conveyors, serve mail storage cars and through trains, respectively. Mail from L is moved to J, then to J-2, which takes it to the presort metering slide. Presort storage, controlled by hand or by slide, prevents choking of the system by any input exceeding capacity. Storage time is also electronically controlled to prevent undue delay; mail is recalled from storage on first-in, first-out basis. Mail comes from storage to metering slide via D and E. Photo cells control the rate of recall.

Sorted mail from loaders is collected either in platform trucks for movement to through trains or by indexing conveyors, ST-2 through ST-30, for mechanical loading into storage cars. Carloading is controlled electronically, in sequence or at random, manually. Storage-car loading is handled by 14 movable deflectors and chutes along conveyor I, with two-direction chute for loading of platform trucks. Conveyors G and H are also part of the carloading system.

Overlooking the mail system is a control office from which a supervisor monitors system operations. He has two-way communication with personnel working in the mail-handling area.

Reasons for installing the automated mail handling facility are not hard to find when one considers that Nashville is the religious-publication printing center of the U.S. Just two of the many religious publishing houses in Nashville turned out 33.2 million lb of publications last year—and all of these publications are handled through the Nashville Post Office.

NEW PRODUCTS REPORT



Data Transmission (RA-1)

DataRay system's 401A punched card reader and 401B translator team up with Bell System's Data Phone service to transmit information from punched cards at different locations to a central office. At the transmitting end, each card reader can accept several card sizes, including the 22-, 51- and 80-column cards. Transmission takes place at 10 columns per sec. At the receiving center, the transmitted data is converted by the translator into another punched card. *Raytheon Co.*

Derrick Turret (RA-2)

A new hydraulic derrick, series PM-50-70 Pole-Master, with a revolving operator's seat and control panel, is installed as a top mount anywhere on the truck body. Features include: maximum sheave height of 32½ ft and horizontal length of 22½ ft; vertical travel from 80 deg above to more than 20 deg below horizontal; 360 deg rotation and digging range from 15 ft to 22½ ft; hoists 9,000 lb and exerts 3,000-lb down pressure. *McCabe-Powers Body Co.*

Aluminum Case (RA-3)

A new aluminum instrument case is fabricated of extruded parts with welded construction. Permanently installed keyhole channels provide for flexibility in arranging fixtures, relay shelves and backboards. Standard adjustable fixtures, as used with GRS modular, steel instrument cases, are interchangeable with the new aluminum case. High and low single, and high and low double cases with front and rear doors, are available, either insulated or uninsulated. *General Railway Signal Co.*

Electronic Switching (RA-4)

A fully electronic solid-state communications switching system for voice-frequency transmission employs a random selection principle whereby a desired connection is made with great speed to one of a multiplicity of circuits. This is achieved by what is known as an end-marking, self-seeking switching network using four-layer semiconductor diodes; it requires no control circuits. A 200-line unit fits into a space occupied by one or two file cabinets. *ITT-Kellogg.*

Aerial Ladder (RA-5)

The EME aerial ladder features a new-type self-leveling basket with single wobble-stick control, which easily operates with one hand, enables the operator to extend or retract the ladder, raise or lower it, or rotate it either right or left in a 360-deg arc, all at either full or half-speed. Three sizes provide maximum working heights of 26½ ft, 30 ft or 35 ft, when ladders are mounted on a 36-in.-high truck bed. *Halline Utility Equipment Co.*

New Model Elbows (RA-6)

New models of the HV-series elbow have 65-ft and 75-ft working heights, and horizontal reaches of 40½ ft and 43 ft 7 in., respectively. With a bucket payload of 600 lb (500 lb for the 75-ft model), the new aerial elbow has an upper arm travel of 135 deg, a lower arm travel of 100 deg. Special shielding and insulation permit bare-hand maintenance of live lines (up to 460-kv line-to-line). An optional gin pole can handle more than 2,000 lb of load and wire spans. *Holan Corp.*

RAILWAY AGE WEEKLY

30 Church Street, N.Y. 7, N.Y. READERS' SERVICE DEPT. (Att. George Johnson)

PLEASE SEND ADDITIONAL INFORMATION ABOUT PRODUCTS ADVERTISED ON PAGES 2 3 4 6 8 11 11-14 16-17 18-19 21 26-27 29 30 31 32-33 38a 38b 45 47 48

PLEASE SEND INFORMATION ABOUT PRODUCTS DESCRIBED ON PAGE 37, MARKED RA-1 RA-2 RA-3 RA-4 RA-5 RA-6

NAME ..... TITLE .....

COMPANY .....

ADDRESS .....

CITY ..... ZONE ..... STATE .....

8/13/62

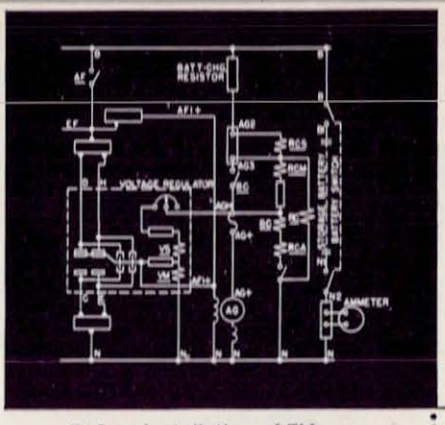
☐ Please send information about subscribing to Railway Age

SIMPLIFY LOCOMOTIVE CONTROL PANELS...REDUCE MAINTENANCE COSTS

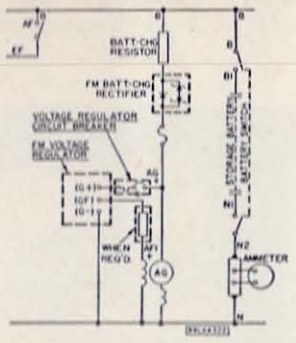
with Fairbanks-Morse **Transistor** Voltage Regulators and Battery Charging Rectifiers. For use on Fairbanks-Morse, ALCO, EMD, GE and Baldwin Locomotives.

Replace your present mechanical voltage regulator, battery charging contactor and reverse current relay with this FM Regulator-Rectifier package.

Eliminate components containing moving parts subject to wear, burning and misadjustment.



Before installation of FM Regulator-Rectifier Package

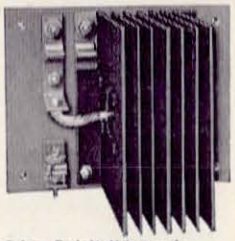


After installation of FM Regulator-Rectifier Package

COMPACT SEALED UNITS • LOW COST • MAINTENANCE FREE • EASILY INSTALLED

FM TRANSISTOR VOLTAGE REGULATOR

- No moving parts . . . shockproof
- Simple adjustment . . . micro-second response
- ± 1% voltage regulation
- Standardization . . . one regulator for all locomotives with 75 V auxiliaries.



FM BATTERY CHARGING RECTIFIER

- 300 and 400 PIV ratings
- Single rectifier cell
- Transient voltage suppression
- Large copper heat sink permits high ambient operation . . . eliminates battery charging contactor and reverse current relay.

For details write: Fairbanks, Morse & Co., Magneto and Engine Accessories Division, Beloit, Wisconsin

132 Years of Customer Acceptance Engineered Into Every FM Product — Compressors • Diesel Engines • Engine Accessories • Generators • Motors • Pumps • Scales

FAIRBANKS MORSE
A MAJOR INDUSTRIAL COMPONENT OF
FAIRBANKS WHITNEY

Contract Ballast Cleaning and Rail Grinding for the Railroads of United States and Canada.

Just Ask the Railroads That have used us!

FRANK SPENO RAILROAD BALLAST CLEANING CO., INC.

Clark Street
East Syracuse, N.Y..

306 North Cayuga St.
Ithaca, N.Y.

Products Reference No. 38b

How much does M. of W. cost on your railroad?

In his new book on railway cost-finding,* E. C. Poole has a table (page 44), showing Maintenance of Way and Structures expense per 1000 gross ton-miles of 30 different railroads.

This cost shows an amazing variation—from 49c to $3.14 per 1000 gross ton-miles. And high cost shows no automatic connection with light traffic density. One road with just under 3700 g.t.m. per mile of line has a MW&S cost of 52c per 1000 g.t.m.—and another with almost 8500 g.t.m. has a cost of 51¢!

Knowing costs (as the first step in reducing them) is the "wave of the future" for professional advancement in railroading.

***COSTS—A TOOL OF RAILROAD MANAGEMENT,** published by Simmons-Boardman Publishing Corporation, 30 Church Street, New York 7, New York. 193 pages (8½ inches x 11 inches, soft bound) plus many charts and graphs. Price $6 per copy—liberal discounts for orders in quantity.

Market Outlook

Carloadings Rise 0.2% Above Previous Week's

Loadings of revenue freight in the week ended Aug. 4 totaled 568,424 cars, the Association of American Railroads announced on Aug. 9. This was an increase of 1,293 cars, or 0.2%, compared with the previous week; a decrease of 19,845 cars, or 3.4%, compared with the corresponding week last year; and a decrease of 26,020 cars, or 4.4%, compared with the equivalent 1960 week.

REVENUE FREIGHT CARLOADINGS

For the week ended Saturday, August 4

District	1962	1961	1960
Eastern	79,868	81,496	82,684
Allegheny	90,048	97,876	94,454
Pocahontas ...	50,422	51,598	50,824
Southern	105,769	105,555	105,171
Northwestern ..	91,445	98,128	102,667
Central Western	112,454	115,627	118,687
Southwestern .	38,418	37,989	39,957
Total Western Districts	242,317	251,744	261,311
Total All Roads	568,424	588,269	594,444
Commodities:			
Grain and grain products	51,998	63,672	64,166
Livestock	2,747	2,933	3,465
Coal	105,109	103,850	102,529
Coke	5,805	6,689	5,674
Forest Products	39,433	39,527	39,749
Ore	51,441	55,657	58,722
Merchandise l.c.l.	22,557	28,151	34,631
Miscellaneous .	289,334	287,790	285,508
August 4	568,424	588,269	594,444
July 28	567,131	591,301	613,988
July 21	558,246	584,137	619,818
July 14	497,660	573,306	606,814
July 7	419,584	424,192	457,779
Cumulative total, 31 weeks ..	16,984,092	16,354,877	18,582,633

PIGGYBACK CARLOADINGS.—U. S. piggyback loadings for the week ended July 28 totaled 13,431 cars, compared with 11,015 for the corresponding 1961 week. Loadings for 1962 up to July 28 totaled 395,791 cars, compared with 327,769 for the corresponding period of 1961.

IN CANADA.—Carloadings for the seven-day period ended July 21 totaled 74,916 cars, compared with 75,801 for the previous seven-day period, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada		
July 21, 1962	74,916	21,716
July 21, 1961	73,933	21,337
Cumulative Totals		
July 21, 1962	1,908,298	682,527
July 21, 1961	1,866,915	688,750

New Equipment

FREIGHT-TRAIN CARS

► *Canadian Pacific.*—Ordered 100 89-ft tri-level auto rack flat cars from National Steel Car Corp., Hamilton, Ont. Approximate cost of the order is $2,300,000 bringing to $18,700,000 the cost of orders placed this year by CPR for new freight-train equipment.

► *Chicago & North Western.*—Ordered 30 70-ton covered hopper cars from General American at a cost of $450,000 for October delivery.

► *Gulf, Mobile & Ohio.*—Freight car program will involve expenditure of approximately $5,850,000 ($5,150,000 for purchase of new cars, $700,000 for upgrading existing equipment). Road will purchase 250 70-ton cushion underframe box cars; 50 100-ton covered hopper cars; 50 53-ft, 6-in. flat cars; and 50 70-ton covered hopper cars. Order for the first 50 box cars has been placed with Pullman-Standard. GM&O shops will upgrade 100 box cars and convert 50 hopper cars to wood chip cars. President Glen P. Brock indicated that new depreciation guidelines "have added impetus to GM&O's plan to modernize its motive power and freight car fleet and have made it possible to accelerate the program."

► *New York Central.*—Ordered 50 70-ton insulated box cars from General American at a cost of approximately $920,000 for December delivery.

► *Rock Island.*—Ordered five Dia-Flo covered hopper cars from General American at a cost of approximately $70,000. Deliveries are scheduled for October.

► *Union Pacific*—Will add 1,650 new cars to its freight car fleet. All cars will be equipped with roller bearings. Deliveries are scheduled for the remainder of 1962 and early 1963. No break-down of types of cars was made by the road.

PIGGYBACK

► *Southern Pacific.*—Is purchasing, through its subsidiary, Pacific Motor Trucking, 80 containers and 50 trailer frames to be used in a pilot container operation between the San Francisco Bay area and Los Angeles. Two 40-ton gantry cranes will be used for handling the containers and piggyback trailers.

SPECIAL

► *XTRA, Inc.*—Placed orders for 710 units of equipment as follows: 350 trailers, 100 marine containers, 50 domestic containers, all from Highway Trailer Industries; 100 trailers, Great Dane; 100 trailers, Dorsey; 10 trailers, Brown. The new equipment will be added to an existing fleet of 1,900 units which are provided to railroads and overseas water carriers on a per diem basis.

LOCOMOTIVES

► *Gulf, Mobile & Ohio.*—Ordered 20 2,250-hp diesels from Electro-Motive Division at a cost of $3.5 million. New units will replace 27 now on the roster. GM&O President Glen P. Brock said the order "is the first step in a program to completely modernize our diesel locomotive fleet," which now numbers 251 units.

WORK RULES *(Continued from page 10)*

agreements on new rules—a contention that Mr. Neitzert found "amazing . . . astonishing." Nowhere, he declared, is there any hint that the RLA should impose on the carriers a necessity for getting union agreement before making any changes.

Union counsel called the carrier proposal an abrogation of "their obligation" to bargain, but Judge Perry upheld the carrier position. The Act, he observed, "compels the parties to court—but never to marry."

Two union witnesses — BRT's Charles Luna and BLF&E's Samuel Phillips—gave testimony supporting the organizations' bid for a restraining order pending an appeal to the U.S. Court of Appeals for the Seventh Circuit. The substance of their comments: Chaos would result if the carriers put their demands into effect Aug. 16.

This point, however, had been covered earlier—though not in court—by a carrier spokesman's comment that while the rules themselves would be placed in effect, actual changes would be worked out over a period of time, not all made instantly at 12:01 a.m. next Thursday, official hour of the implementation.

Southern Wins Fight For 'Big John' Rates

The Southern's multiple-car grain rates will be in effect this week after nearly a year's delay—unless competing water carriers and protesting grain interests obtain from the United States Supreme Court an order setting aside a ruling of the Federal Circuit Court of Appeals at Montgomery, Ala.

The latter court on Aug. 8 denied the plaintiffs' motion to continue a temporary restraining order which prevented the rates from becoming effective Aug. 7, the day on which the ICC's suspension power ran out. That

JULY 17, 1962, PROMULGATION	NOV. 2, 1959, NOTICE
Use of Firemen	
• Three-phase separation of 13,000 men in 12 months; elimination of remaining 27,000 firemen by attrition. • Partial pay for 36 months to first group plus partial payment of retraining.	• Immediate elimination of firemen employed on other-than-steam power in road freight and yard service. • No protective provisions mentioned.
Wage Structure	
• Eliminate dual basis of pay. Substitute payment on mileage basis after stipulated number of miles run. Overtime after eight hours. • Eliminate graduated rates. • Guarantee 40-hour week for yard employees on extra board.	• Eliminate dual basis of pay and base compensation only on miles or hours, whichever is greater. • Maintain graduated scale on reduced basis. • No guarantee for yard employees.
Management Rights	
• Carrier to have unlimited right to introduce technological change. • Either party given right to conduct survey to determine desired crew consist changes. Time limits set for notice, negotiation. • No rule to require operating employees on self-propelled equipment except in certain switching operations. • Establishment of inter-divisional runs subject to negotiation. • Arbitration by special tribunals of disputes arising out of technological changes, crew-consist changes, establishment of inter-divisional runs.	• Rights involving technological change not specified. • Management given "unrestricted right" to determine consist of train crews. • Management given "unrestricted right" to determine employees needed on self-propelled equipment. • Management given right to establish inter-divisional runs and change home terminals. • Arbitration proposed only regarding conditions carriers must meet in changing runs or terminals. No provision for "tribunals."
Combining Road and Yard Service	
• Road crews required to handle own engines, cabooses; do switching involving cars of their own trains.	• Road crews must perform any and all switching required of them at initial, intermediate, final terminals, whether or not involving cars of their own trains; yard crews may be required to perform yard and road work.

Note: July 17, 1962, promulgation also covers establishment of mandatory retire-at-65 plan; provides certain holiday benefits; provides for expenses at away-from-home terminals; and sets up protective provisions for displaced firemen and others. None of these is covered by the Nov. 2, 1959, notice.

power permits the Commission to hold up rates for seven months.

The Montgomery court found that there was no reasonable probability that the plaintiffs would prevail in their argument that federal courts have jurisdiction to prevent the rates from going into effect, since requirements of the Interstate Commerce Act for hearing and decision on the part of the ICC are being observed. At the same time, however, the court continued the restraining order in effect until Aug. 11 to give the plaintiffs time to appeal to the U.S. Supreme Court, if they desired to do so.

This further delay was protested by the Southern. It said many shippers and receivers of grain expected to begin using the rates on Aug. 7 "as provided by law," and that these shippers and receivers, as well as consumers of grain throughout the Southeast, would be subjected to "substantial loss because they have relied on the clear language of the Interstate Commerce Act in providing facilities at their own expense to handle grain shipments in 'Big John' cars and in arranging grain transactions which contemplated lower transportation costs."

Southern estimates that the new rates will mean savings in transportation costs of $30 to $40 million a year. In the court case it was supported by the Department of Agriculture, Southern Governors' Conference, the Southeastern Association of Railroad and Utilities Commissioners and the State of Georgia. Meanwhile, the long-drawn-out hearing on the rates continue at the ICC.

SP Plans Container 'Pilot Operation'

Southern Pacific has announced plans for a new container service between the San Francisco Bay area and Los Angeles. Two 40-ton gantry cranes will be used for handling the containers and for piggyback trailers.

Through Pacific Motor Trucking, its highway subsidiary, SP is purchasing 80 containers and 50 trailer frames to augment its piggyback equipment in what the railroad describes as a "pilot operation" between the two cities.

Thomas A. Fante, SP's manager of specialized operations, explained: "We intend to use this section of the West Coast as a testing laboratory to further refine and improve our container operations."

One of the new cranes has been installed at Oakland. The other is being installed at Los Angeles, Mr. Fante said. One of the cranes has a 36-ft width between wheels and the other 38 ft. This is wide enough, Mr. Fante said, for the crane to straddle a freight train as well as an adjacent driveway and to transfer containers from the railroad flat car to the truck-trailer frame, or vice versa. Piggyback trailers can also be handled by the cranes, Mr. Fante said, eliminating the need for special ramps.

Sixty of the new SP containers will be 20 ft long. The other 20 will be 40 ft long. Both sizes are to be eight ft wide by eight ft six in. high, conforming to specifications recommended by the American Standards Association. Containers of either size will carry up to 40,000 lb, the highway maximum, Mr. Fante said.

Rail equipment to be used in the service will consist of 85-ft piggyback flat cars. These are capable of carrying four 20-ft or two 40-ft containers, or a combination of both sizes, Mr. Fante said.

Cleveland Studies Transit Extension

Cleveland Transit System's Engineering Department has completed a study of engineering and feasibility of Cleveland's proposed "Southwest Rapid Transit Extension." Estimated cost of the seven-mile line was given as $17,310,000. The report stated that the extension is feasible from an operating and maintenance standpoint, since estimated revenues from riders would be more than enough to cover these costs.

Total daily weekday riders would number more than 10,000, the report said, 4,500 of whom would be new riders and 5,500 riders diverted from other CTS routes. Four stations, with spaces for a total of 2,600 automobiles would be located along the route. A total of 40 new rapid transit cars would be required, or 32 cars if cars larger than present CTS transit cars were acquired.

The $17,310,000 figure for capital cost breaks down as follows: construction cost—$11,380,000; grade separations—$930,000; parking lots—$1,200,000; rapid transit cars—$3,800,000.

The proposed extension would parallel closely existing railroad right-of-way. It would branch off the existing rapid transit line at a point near Fulton Road and West 44th St. It would parallel New York Central Railroad tracks to a point at Clinton Road, near West 94th St., where it would turn south to other New York Central tracks just north of Brookpark road. It would then turn east and parallel the existing railroad tracks to West 33rd St. and Brookpark. Alternative routes were considered—including one through the Cuyahoga Valley parallel to the Baltimore & Ohio tracks, but the proposed route was considered to be the most economical. Also, it serves both the Parma and Brooklyn areas.

The proposed line would be at grade along the NYC tracks to about West 94th St., where it would climb for an overpass over the tracks and Clinton Road. South of Clinton the road would again be at grade, except for an elevated structure across the Big Creek Valley, to the Memphis area, which would be crossed on an overpass. Beyond Memphis, the proposed extension would stay above grade, then would descend for an underpass. It would continue below grade to Ridge Road, then join the NYC tracks and run parallel to the railroad to West 33rd St.

This is the third rapid transit feasibility study to be made by the CTS Engineering Dept. In the first study, released in April 1960, it was estimated that an extension to Cleveland Hopkins Airport would cost from $12,260,000 to $13,910,000, depending on which of alternate routes would be used. This extension would attract 2,294 new riders, the report estimated.

A second feasibility study, released in December 1960, estimated that an extension to the southeast area would cost an estimated $19,100,000 and that an estimated 8,400 new riders would be attracted.

Letters from Readers

Integration?

Kent, Ohio

To the Editor:

. . . . An interesting item [RA, March 26, p. 72] concerns the acquisition of control of National Carloading Corp. from the Santa Fe by Pacific Intermountain Express. Whenever integration or common ownership is discussed, the usual villain in the situation is the rail industry, as if no other carrier would ever stoop to such a thing. No recognition is made of the fact that McLean [Trucking Co.] acquired control of Pan-Atlantic [Steamship Lines] and affiliated companies. Will any greater recognition be made of the fact that here a motor carrier has acquired control of another mode of transportation? Isn't this integration?

Newton Morton
Associate Professor of Transportation
College of Business Administration
Kent State University

PEOPLE IN THE NEWS

BALTIMORE & OHIO CHICAGO TERMINAL.—**John R. Stone,** assistant general auditor since April, appointed general auditor on Aug. 1, succeeding **V. H. Hansen,** retired after 50 years of service. **Walter B. Vander Veer,** division engineer, B&O, Pittsburgh, Pa., named assistant superintendent, Chicago.

ELGIN, JOLIET & EASTERN.—**Vernard M. Christensen,** superintendent, South Chicago division, appointed general superintendent, Joliet, Ill., to replace **Stuart H. Shepley,** named chief engineer, Joliet. **Frank H. Herrold,** superintendent, Gary Mill division, succeeds Mr. Christensen, and in turn is succeeded by **Clinton O. Ferner,** assistant superintendent, Gary, Ind. **Lawrence A. Brophy,** trainmaster, Kirk Yard, Gary, Ind., named assistant superintendent, Gary division, replacing **Harry J. Paletz,** transferred to the Gary Mill division. **Alfred C. Johnson** named engineer of bridges and buildings, Joliet. **C. E. McEntee** named division engineer, Joliet division, Joliet, Ill.

JACKSONVILLE TERMINAL.—**Marshall C. Jennette,** chief engineer, Jacksonville, Fla., elected president and general manager on Aug. 1, succeeding **John H. Gill,** retired.

LOUISVILLE & NASHVILLE.—**George M. Timberman,** manager—coal traffic, appointed director of coal traffic. **James R. Claxon,** coal traffic agent, appointed manager of sales, coal traffic, and **Charles J. Wetzel,** assistant to manager coal traffic, named manager of service, coal traffic.

MILWAUKEE. — **Stewart P. Elmslie,** general agent, Minneapolis, appointed assistant to vice president-traffic, Chicago. **J. Harold Mitcham,** division freight and passenger agent, Sioux City, Iowa, succeeds Mr. Elmslie, and in turn is succeeded by **Robert L. Johnson,** assistant to freight traffic manager, sales and service, Chicago. **Peter Braun,** general agent, St. Paul, transferred to Memphis, Tenn., to succeed **Rolland L. Audas,** appointed general agent, Omaha, Neb. Mr. Braun's successor is **Bernard H. Desens,** chief clerk to general freight traffic manager, sales and service, Chicago. **John T. Conlin,** assistant general agent, Seattle, appointed general agent there, replacing **Frank W. Watkins,** retired. **Philip J. Malo,** city freight agent, Milwaukee, Wis., appointed district freight and passenger agent, LaCrosse, Wis. **George B. Hanson,** chief clerk, Minneapolis, appointed assistant to freight traffic manager, Chicago.

SOUTHERN PACIFIC. — **Frank E. Kalbaugh,** formerly general manager of SP's subsidiary Southern Pacific Pipelines, Inc., named to the newly created position of assistant to vice president, SP, Los Angeles.

SPOKANE, PORTLAND & SEATTLE.—**Robert A. Lawrence,** assistant traffic manager, Portland, Ore., advanced to traffic manager there, to succeed **G. F. Ehlen,** retired (RA, Aug. 6, p. 55). Mr. Lawrence's successor is **E. H. Block,** general freight agent, Portland, who in turn is replaced by **L. S. Davis, Jr.,** assistant general freight agent. **H. F. Erz,** general agent, replaces Mr. Davis, and in turn is replaced by **H. W. Miller,** city freight agent.

WABASH.—**W. G. Duchek,** manager trailer train service, St. Louis, appointed manager piggyback operations. **M. H. Gramann,** district sales manager, named assistant manager piggyback operations. In addition to his present duties, **R. B. Short,** superintendent stations and transfers, will have jurisdiction over all station matters. **C. F. Bratvogel,** supervisor loading services and loss and damage prevention, named assistant superintendent stations and transfers.

FREE PARKING

for transient guests

Overlooking Lake Michigan and Belmont Yacht Harbor. 12 minutes from the loop—direct busses at the door.

Charming, new Mansion House Dining Room and unique Cocktail Room—The Dam Site.

Banquet and Meeting rooms accommodate up to 400 persons.

700 Rooms & Suites
TRANSIENT & PERMANENT
Full Hotel Services
Singles from $9.50
Doubles from $14

F. J. PETITMAIRE
General Manager

Belmont Hotel

BITTERSWEET 8-2100
Teletype CG 1-4584
3172 NORTH SHERIDAN ROAD
CHICAGO

Supply Trade

John D. Mitros has been appointed Western Editor of **Railway Age** at Chicago, effective Aug. 6, to succeed **B. Charles Walters.** Mr. Mitros, formerly editor of the Illinois Central Magazine, joined that road in 1953 and was appointed editor of the magazine in 1959. Mr. Walters resigned to accept a position as Director of Research and Development, Clipper Carloading Co., Chicago. **Gus Welty,** who has been serving temporarily as Western Editor, will be transferred to New York in a senior editorial position.

Patrick B. McGinnis, chairman of the **Boston & Maine** and former president of the **New Haven,** on Aug. 6 was named consultant to **Highway Trailer Industries, Inc.** The appointment was made by **James D. McLean,** who became president of Highway Trailer on Aug. 1.

Paul W. Campbell has rejoined **Trailmobile Inc.** as manager of the sales and service branch at 4111 Central Avenue, Detroit, Mich. He succeeds **Dale M. Vredenburg,** who has been transferred to a fleet sales position. For the past year, Mr. Campbell has been railroad sales manager for the Drott Manufacturing Corp.

Vernard M. Christensen
EJ&E

Stuart H. Shepley
EJ&E

Clinton O. Ferner
EJ&E

Alfred C. Johnson
EJ&E

George M. Timberman
L&N

Stewart P. Elmslie
Milwaukee

Frank E. Kalbaugh
SP

Robert A. Lawrence
SP&S

John D. Mitros
Railway Age

Patrick B. McGinnis
Highway Trailer

Water Carriers Blast Kennedy Bills

► **The Story at a Glance: Water carriers last week launched their attack on bills to implement President Kennedy's transportation message. The opposition presentation got under way Aug. 7 at hearings before the House Committee on Interstate and Foreign Commerce. It included warnings that passage of the bills would result in the death of domestic water carriers, but Committee Chairman Oren Harris (D.-Ark.) said he couldn't understand how such well-subsidized operations could be jeopardized by the proposed legislation.**

Water-carrier fears of free competition for the business of carrying bulk commodities were pointed up last week at House Interstate Commerce Committee hearings on bills to implement recommendations of President Kennedy's transportation message. There are two such House bills before the committee —H.R. 11583 and H.R. 11584.

The former would end ICC and Civil Aeronautics Board powers to fix minimum rates for railroad, truck and air transportation of commodities in bulk, the water transportation of which is now exempt from all regulation, and for railroad, water and air transportation of commodities, the truck transportation of which is free of regulation under the Interstate Commerce Act's so-called agricultural exemptions. H.R. 11584 would implement various other Presidential recommendations which were not already embodied in other bills introduced before the President submitted his message (RA, May 7, p. 21).

Committee Chairman Harris' statement that he couldn't understand how the proposed legislation could jeopardize the well-subsidized water carriers came after John L. Weller, president of Seatrain Lines, had said he believed, "after careful study, that enactment of H.R. 11583 would mean the end of the coastwise and intercoastal shipping industry, as well as serious financial distress to other forms of transportation." Mr. Harris said:

"The waterways are provided by the government. You pay no taxes on such facilities—no user charges. Yet, you say you can't compete. I just don't get it. I don't see how you'd be jeopardized. Under the circumstances if you can't compete I don't know who in the world could."

Meanwhile, Chairman Harris had said he didn't think the people or Congress were going to let one mode of transportation drive another mode out of business. The chairman then went on, however, to say he is "strong for the proposition that we should not be holding up umbrellas." He thought Congress made that clear when it passed the 1958 Transportation Act with its rate-freedom provision.

Mr. Weller's presentation was made on behalf of the Common Carrier Conference of domestic water carriers which has headquarters in St. Louis. He urged repeal of the present bulk-commodity exemption as an alternative to the President's proposal.

'Unrealistic'

This alternative idea had been dealt with at an earlier session of the hearing by Chairman Ben W. Heineman of the Chicago & North Western, who called it "unrealistic." Farmers and industrial shippers "would rise up in wrath" against it, Mr. Heineman explained, noting that those interests are supporting the President's proposal "because they are interested in lower costs and real competition."

As to the latter, Mr. Weller indicated his view that shippers are already doing pretty well. "In recent years," he said, "there has been a tendency for major shippers to make up for increases in their production, distribution and merchandising costs by forcing down freight rates, although the costs of the carriers have not been reduced. The inevitable end result of constantly declining freight rates without reduced transportation costs will be bankruptcy of the carriers, with ultimate harmful effect on the economy as a whole."

Another witness for the Common Carrier Conference was A. C. Ingersoll, Jr., president of Federal Barge Lines. Another organization—Inland Waterways Common Carriers Association of Chicago—offered presentations of its president, J. W. Hershey, and of C. E. Childe, a transportation consultant who served in the 1941-1944 period as a member of the Board of Investigation and Research created by the Transportation Act of 1940. The assignment of that temporary agency was to make several transport studies.

Mr. Hershey said the proposal to free bulk commodities from minimum-rate regulation would result in discriminatory pricing of transportation service. Like Mr. Weller, he advocated the alternative course of repealing the present exemptions. Mr. Hershey also stressed his concern about the lack of an agreed basis for determining relative costs of different modes of transportation. His preference for the full-cost basis as against the out-of-pocket basis defended by the railroads is reflected in this statement:

"As the low cost operator on the transportation scene, we have only one fear. It is that a higher cost operator will be allowed to go below his costs to undercut us. At this point, to give the railroads a license to ignore costs, as this legislation does, is simply to sign our death warrant."

Bankruptcies?

Mr. Childe said that if the ICC's power to fix minimum rates on bulk commodities is abolished, "the country would be, in my opinion, left helpless to stop ruinous rate-cutting by the railroads and competing modes of transport, and would return to chaotic conditions the country found intolerable 75 years ago." Railroad rate reductions since 1955 were characterized by Mr. Childe as a campaign which "has not resulted, to date, in an increase in their total traffic, but it has drastically reduced their revenues and rate of return on their investment."

Noting financial difficulties now being experienced by carriers of all modes, Mr. Childe found it "plain that if the railroads' rate-cutting campaign is continued and intensified there will be wholesale bankruptcies of both railroads and competing carriers."

Mr. Childe diagnosed the railroads' "trouble" as "basically a system of pricing for their services under which one shipper was charged a much higher price than another for similar services and which, on the whole, has failed to give the railroads adequate profits." Mr. Childe also had figures from which he drew the conclusion that "low competitive freight rates have been in the past, and are now, the main cause of the railroads' low earnings."

Additional shipper testimony in support of the bills came last week from Tyre Taylor of the Southern States Industrial Council and A. P. Heiner, vice president of Kaiser Steel Corp. The National Industrial Traffic League's favorable presentation was made at previous sessions.

YOU OUGHT TO KNOW

North American Car's orders for new equipment hit a peak of $16 million at mid-year—but "there has been some softening in demand for new leased rail equipment" recently, President E. C. R. Lasher reported last week. North American, meanwhile, posted new highs in gross operating revenues and sales and earnings for the first six months of '62.

Sales of The Budd Co. for the six months ended June 30 were 28% increased over those in the first half of 1961, Budd reported recently. This is partly a reflection of better conditions in the automotive industry, said President Edward G. Budd, but he added that the company recently had received $12 million in orders for commuter railway cars, including a $3 million order for modern, self-propelled high-speed cars under a loan approved by the federal government for the improvement of mass rail transportation.

Construction began Aug. 1 on the third and last segment of the Portal Pipeline Company's crude oil transport system in North Dakota and Minnesota. Portal (formed by Great Northern, Hunt Oil and Northwestern Refining) expects to have the entire project completed by late autumn.

Roy E. Davidson has been reelected, unanimously, to a four-year term as grand chief engineer of the BLE. Mr. Davidson assumed the top brotherhood job Aug. 1, 1960, when former Grand Chief Guy L. Brown retired. Previously, he had been first assistant grand chief for seven years.

A "good, consistent majority" of SUNA members has ratified a wage settlement ending a three-year-old dispute that went all the way to the U. S. Supreme Court after a pattern wage agreement was rejected in an earlier vote.

Value Line Investment Survey still looks for railroad earnings to make a strong recovery (more than 20%) from 1961's depressed levels, but says "the improvement will be less than originally estimated." Chief reasons are "the premature topping out of the economic recovery" and the non-op pay boost. On the plus side, the Investment Survey lists the Administration's transportation program, the improved climate for railroad mergers, and prospects that featherbedding practices will be curtailed.

Passenger traffic on the Atlantic Coast Line is booming, says Ray Paschall, manager passenger sales and service. Travel in July was up 11% above last year, Mr. Paschall reports, continuing a marked upward trend that began last fall. For the second quarter, traffic was up 9%; 5% in April, 7% in May and 15% in June. The increase is a result of a combination of factors, Mr. Paschall says, among them more attractive vacation programs in Florida, improved service, and increased emphasis on sales promotion.

An emergency board has been created by President Kennedy to investigate a dispute between the Belt of Chicago and those of its employees represented by the Brotherhood of Locomotive Engineers. The dispute involves BLE's demands for several changes in working rules.

"Live and let live" approach should be followed by carriers of different modes, according to Chairman Murphy of the ICC. He told the American Bar Association at San Francisco last week that the positions now taken by the various modes in their "battle royal" for traffic need to be "carefully reexamined for the purpose of evaluating whether they are in the public interest."

St. Lawrence Seaway seems still to be more helpful to importers than to exporters. For the 1962 season through June 30, upbound traffic through the Seaway proper (Montreal-Lake Ontario) was 61% higher than in the same period of 1961—but downbound traffic was 9.7% lower. Increase in upbound shipping is attributed to "extra shipments of iron ore from lower St. Lawrence ports to Hamilton and Lake Erie, and to extra number of ocean vessels carrying both bulk and general cargoes into the Great Lakes." Welland Canal business this year is bigger than in 1961 in both directions—but downbound increase is only 1.1% and includes shipments to Lake Ontario destinations.

Clipper Carloading Company, an "almost exclusive" user of rail piggyback, is now offering forwarder service eastbound from California to the East and the Midwest, for "all commodities." This "major expansion" complements Clipper's previous service between the East and Midwest, and westbound from those areas to the Pacific Coast, Alaska and Hawaii.

Automated LCL handling will be a feature of Missouri Pacific's Miller St. freight station in St. Louis when a new modernization program is completed. The automated equipment is essentially designed to handle the huge volume of LCL that will result from consolidating at Miller St. the St. Louis and East St. Louis operations of three of the nation's biggest freight forwarders. Automation will be achieved by installation of two continuous loop tow lines recessed in channels below floor level and linking each of the two outside platforms with its adjacent island platforms. Electronic controls will provide for identification of 180 freight car locations and 131 truck locations adjacent to the 108 spurs for transfer carts. Each cart will have a coding device which will provide for delivery to any desired spur.

Intercity truck traffic as measured by tons hauled increased 12.9% in this year's first six months compared with 1961's first half, according to American Trucking Associations.

CLASSIFIED ADVERTISEMENTS

SALE OR RENT

2—25 ton & 2—45 ton
GE Diesel Electric
Locomotives ready to work.
R. C. STANHOPE, INC.
60 E. 42nd Street
New York 17, N.Y.
MUrray Hill 2-3076

AXLE LATHE

Bette Bridgeford Heavy Duty Center Drive. 27" swing; distance between ctrs. 8'6". Dia. of hold thru driving head 13¾". Range of longitudinal feeds per revolution .034", .052", .075" & .112". 50 HP motor. New 1953. Hardened ways. Ser. #E7013-1.
AAA Machinery & Equipt. Co.
E. 75th & Morgan Ave.,
Cleveland 27, Ohio
PHONE 883-4000

WANTED

Young track supervisor with engineering degree for Chicago area belt railroad. Good working conditions. Unusual company benefits.
Box 78, RAILWAY AGE
22 West Madison Street
Chicago 2, Illinois

SALE OR RENT

65 Ton, Porter Diesel Electric Locomotive, 400 H.P. Cummins Super-Charged Engines
50 Ton, American Diesel Locomotive Crane
B. M. WEISS COMPANY
Girard Trust Bldg.
Philadelphia 2, Pa.

Faster From Foster
Nation's Largest Warehouse Stocks
RAIL AND TRACK MATERIAL
PIPE, VALVES, FITTINGS
L. B. FOSTER CO.
Pittsburgh 30 - New York 7 - Chicago 1
Houston 2 - Los Angeles 5 - Atlanta 8
Cleveland 35 - San Francisco 11

EUROPEAN INFORMATION

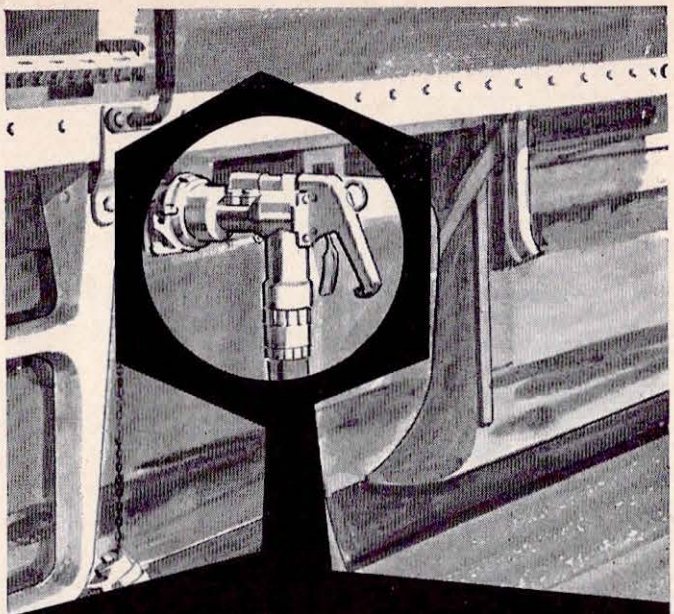
Off-duty reading for railroad men —"European Railways" magazine. Quarterly, illustrated, interesting —includes features on East & West Europe. Only $2.50 a year, $4.50 two years or send $1 for 3 sample copies. (Pay by check or Int. Money Order). European Railways, Evelyn Way, Cobham, Surrey, England.

POSITION OPEN

Midwest firm has opening for Mechanical Design Engineer, preferably experienced in maintenance equipment, development and production. Send resumé to Box 520, RAILWAY AGE, 30 Church St., New York 7, N.Y., giving experience and salary expected. . .

Advertisers' Index

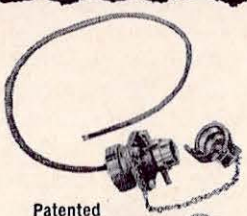
American Car & Foundry 29
American Oil Company 26, 27
Belmont Hotel 42
Bower Roller Bearing Div. 21
Buckeye Iron & Brass Works, Inc. 45
Buckeye Steel Castings Company 30
Edgewater Steel Company 31
Electric Storage Battery Co.,
Exide Industrial Marketing Div. 16, 17
Enterprise Railway Equipment Co. 45
Fairbanks Morse & Company 38
Jackson Vibrators, Inc. 6
Magnus Metal Div. of Natonal Lead Company 18, 19
National Carbon Company Div. of Union Carbide Corp. .. 8
National Castings Company ..... BC
Pullman-Standard ..... 11-14 Incl.
Servo Corporation of America ..... IFC
SKF Industries, Inc. 3
Frank Speno RR Ballast Co., Inc. 38
Symington-Wayne Corporation ..... IBC
United States Steel Corporation 32, 33
Union Switch & Signal (Div. of Westinghouse
Air Brake Co.) 4
WABCO, Union Switch & Signal Co. Div. 4



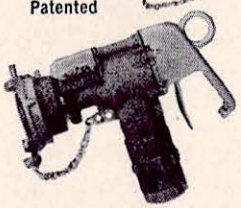
here's why more Class I railroads have converted 100% to Buckeye automatic diesel refueling than to any other system!

The Buckeye System cuts refueling costs. Automatic shut-off eliminates fuel loss, spillage, and contamination. Saves time and labor. Saves money, too!

But, most important, the Buckeye Automatic Diesel Refueling System uses just two basic component parts:



Patented



***THE ADAPTER.** Installs in minutes with no locomotive modification. No cutting, drilling, or welding. No holes in your fuel tanks or skirts. No need to take locomotive to your shop to install. And, best of all, no moving parts on the locomotive that might lead to costly down time for repairs.

THE NOZZLE. A masterpiece of simplicity proved in 15 years of use. Handles all flow requirements. Shuts off automatically at a predetermined level.

*Installs in just 15 minutes with simple hand tools.

Like to see the Buckeye System demonstrated on your locomotives? Write:

ENTERPRISE RAILWAY EQUIPMENT COMPANY
8754 South Dobson Avenue, Chicago 19, Illinois
Representatives for Buckeye railroad products in the U.S.A.

Buckeye BUCKEYE IRON & BRASS WORKS • DAYTON 1, OHIO

Furloughs—Whose Fault?

The concern of railway unions over the terrific erosion in railroad jobs is fully justified. But are they laying the blame for this situation where it belongs, and are they looking in the right place for relief, for indemnity—and for correction?

Most improvement in living standards comes from technological innovation. But there is always a negative side to such change. Making plows used to be a highly skilled job of individual production. A hundred-odd years ago some inventor came along with a cast-iron plow, produced by a repetitive process, and all individual plow-makers were put out of business.

They were just as skillful as ever, but their skill was no longer worth anything. The loss of value of their craft, to some degree, subtracted from the economic advantages of the cast-iron plow. But, under free competition, the innovators got all the gains from the innovation, and the losses had to be borne by the old-style producers. Actually, however, no great hardship resulted—because the change came along gradually, not overnight. The old-style producers had time to embark upon other lines of endeavor; and there was no law that prevented them from getting into the making of new fangled plows, themselves.

In recent years, harness makers have been replaced by auto accessory dealers. The iceman's job has been taken over by automatic refrigerators. The horse-shoer and the livery stable have seen their functions preempted by the garage. In all these cases, the economic gain has gone to the innovators and the economic loss has fallen on old-time business—except to the extent (as has often happened)) that the blacksmiths and livery stable operators went into the garage business.

There is only one kind of business where the fellow who profits from innovations also assumes the burden of the attendant losses. That happens where the business in question is a natural monopoly, as, for instance, the telephone business. When automatic dialing came along, the telephone industry did not have to adopt it overnight—as it would have been forced to do if it were faced with active competition. Instead, it was able to make the change gradually, so no employees had to be dismissed and no heavy existing capital investment was suddenly rendered worthless.

In the railroad business, there has been none of the comfortable, gradual pace of innovation that has characterized the telephone industry. And restrictive legislation and regulation have restrained railroads from going into the barge or truck or aviation business on a large scale—to offset losses in investment and employment opportunities in railroad transportation.

But this isn't all there is to the special handicaps applied to railroads and their employees in adapting themselves to innovations in transportation. In transportation, government has gone out of its way to accelerate the pace of innovation—and to stimulate artificially with gigantic appropriations of tax money the sudden diversion of railroad traffic to other means of transportation.

If the federal government had stayed out of the highway business, and had left long-haul highways to be built by private capital or self-supporting "authorities," the erosion of railroad traffic to trucks would have not been as great and would have occurred much more gradually than it has. Moreover, if railroads had not been restricted in providing truck service, quite likely they would have developed new job opportunities in their highway services which would have offset all employment declines in the railroad side of their business.

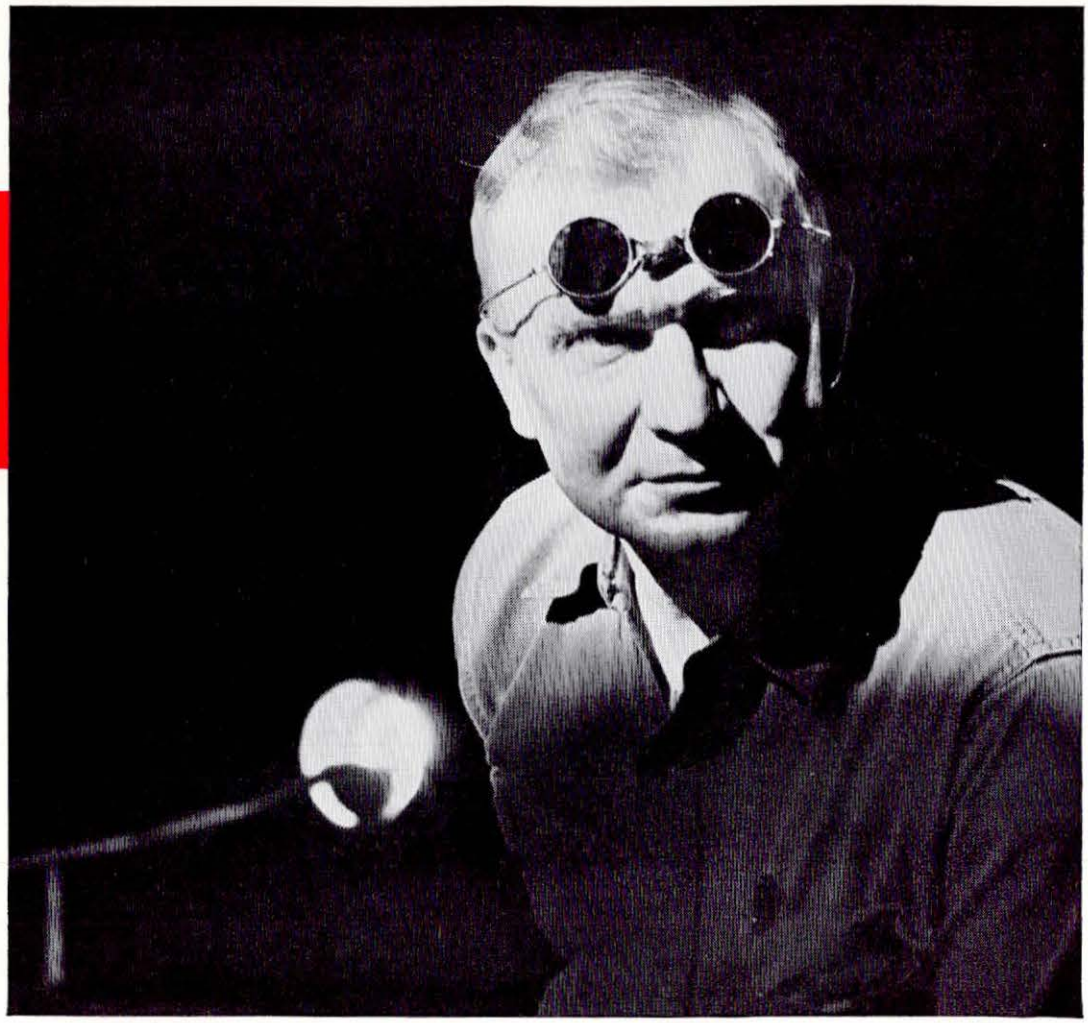
The catastrophic decline that has occurred in railroad employment has resulted—not from the natural changes incident to normal technological innovation—but (1) from artificial stimulation by government of the diversion of traffic away from railroads and (2) from restrictions on the railroads, inhibiting their free adoption of newer modes of transportation.

Railway unions have been endeavoring to protect employment by "make work" rules on the railroads, and by seeking wherever possible to burden railroads with indemnifying employees whose furloughing has become necessary because of declining railroad traffic and earnings. This is an attack on the symptoms of the malady, rather than an attack on its causes.

Railway unions obviously have the right, and indeed the duty, to oppose government policies which unnaturally stimulate the diversion of railroad traffic to other forms of transportation; and which artificially accelerate this diversion. Where such government policies result in the loss of railroad jobs—as they have done and are doing—then the unions would be entirely justified in seeking indemnification by government for their members who are thus injured.

It is neither fair nor an effective remedy for this unhealthy situation for the unions to seek to put the burden of its correction upon the railroads—because railroad companies are not the cause of the condition, nor can they cure it. The unions will really help themselves, and incidentally the railroads, by going after the cause of their troubles—instead of seeking palliatives from their employers, who are just as much the victims of adverse government policies as the employees are.

JOE KOVACH
MELTING
SUPERINTENDENT
WITH SYMINGTON
FOR 26 YEARS

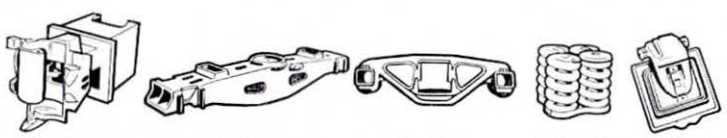


TECHNOLOGY IS HIS TOOL, BUT HIS JUDGMENT AND EXPERIENCE ARE SYMINGTON'S KEY TO QUALITY

Using the latest advances of melting technology, Symington's Joe Kovach applies his experience and judgment to making steel of the highest quality.

Joe began learning his trade 26 years ago at Symington's slag pit. Since then he has advanced through open hearth helper and melter to full responsibility for round-the-clock operation of three 28-ton open hearths. Now in a single day he provides metal for hundreds of castings—in a variety of precise analyses, including armor heats.

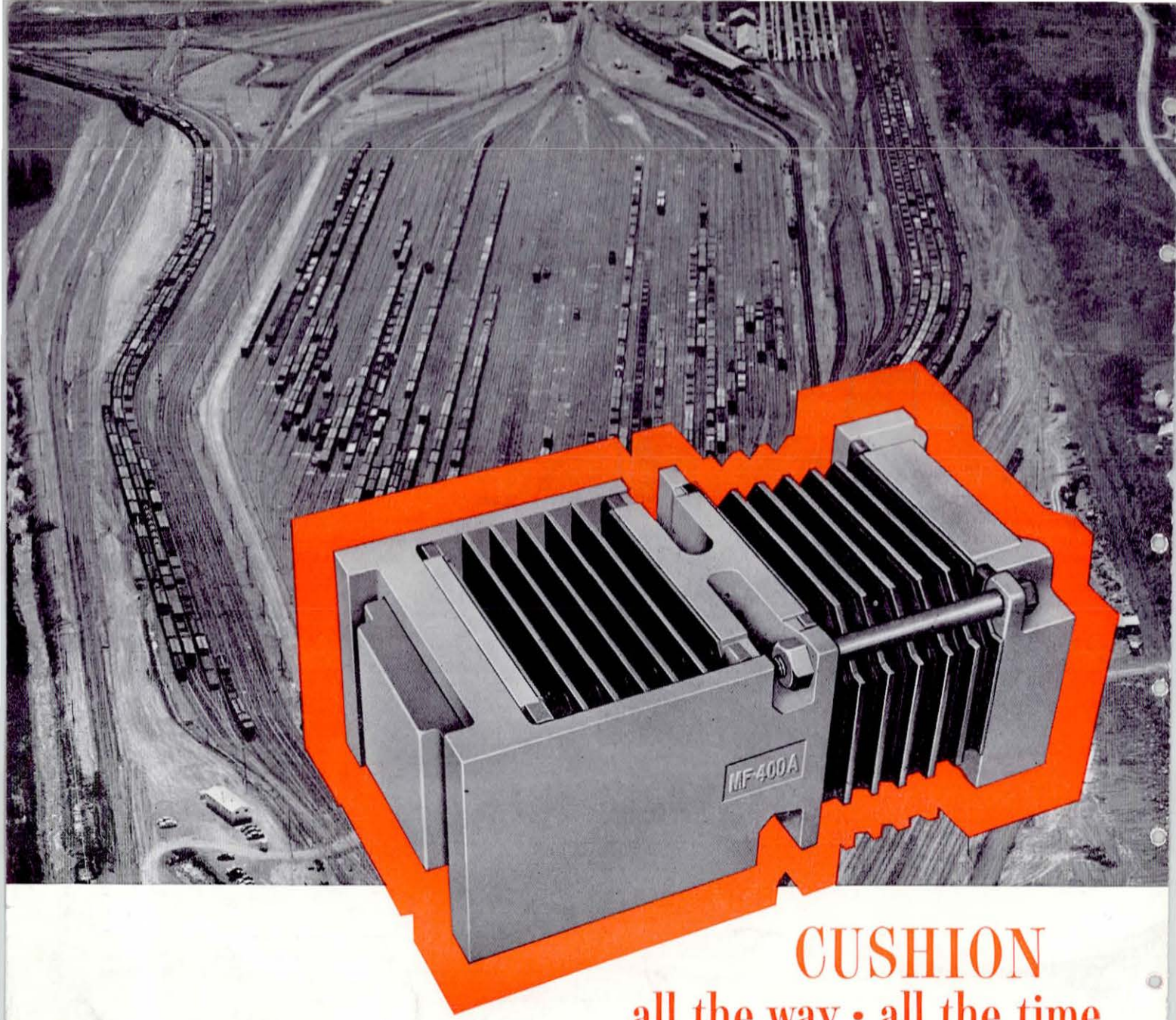
It is because of the skill of Joe Kovach and men like him at Symington that you can rely on the performance of every Symington product.



Couplers and striking castings | Bolsters | Side frames | Coil-snubber spring groups | Journal box lids

Symington Wayne
CORPORATION
SYMINGTON DIVISION

NEW YORK • CHICAGO • BOSTON • PHILADELPHIA • SAN FRANCISCO • ST. LOUIS
IN CANADA: ADANAC SUPPLIES, LTD., MONTREAL • WORKS: DEPEW, N.Y.



CUSHION
all the way • all the time

National MF-400A Draft Gears

- Protects car structure against damaging impact forces.
- Provides high reserve cushioning capacity.
- A.A.R. official* rated capacity 30,460 foot-pounds at 500,000 pounds reaction force.
- Reserve capacity up to maximum of 71,000 foot-pounds.

National Rubber Draft Gears in service over 15 years!

- on all types of freight cars
- on passenger cars
- on diesel locomotives
- on all types of mine cars
- on mine locomotives
- on industrial cars

and are still providing outstanding cushioning to all types of rolling stock under most severe operating conditions, whether freezing cold or in tropical heat.

* A.A.R. Specifications M-901D-59

GEARED TO PROGRESS P R I MEMBER

Transportation Products Division

International Division, Cleveland 6, Ohio
National Castings Company of Canada, Ltd. Toronto 2B, Ontario

NATIONAL CASTINGS COMPANY
Cleveland 6, Ohio

COUPLERS • YOKES • DRAFT GEARS • FREIGHT TRUCKS • JOURNAL BOXES • ROLLER BEARING ADAPTERS • NATIONAL SPEEDLOADER CONTAINER HANDLING SYSTEM